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This document reports proceedings of a conference attended by state department of education members, college deans of education, and school superintendents from Missouri, Kentucky, Tennessee, and Illinois. Major contents are two addresses: (1) "The Future and Educational Personnel Development" in which Dean Corrigan of the U.S. Office of Education discusses needed realignment of school personnel and the development of specialists who can enable schools to provide individualized continuing progress instruction for each student; and (2) "State of Washington: The New Plan in Teacher Education" in which William H. Drummond of the Washington State Department of Education discusses a program in which professional associations and school organizations share with colleges and universities the responsibility for individualized programs continuing throughout a teacher's career. Following the addresses are comments of a four-member reactor panel and conference reviews and recommendations presented by three participants. Appended are (1) preliminary information obtained from 28 replies to a 10-item educational supply and demand questionnaire sent to the 10 largest school systems in each of the four states; and (2) the 1968 "State of Washington Statement of Standards for Preparation of School Professional Personnel Leading to Certification." (JS)

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Proceedings of a Conference on

SUPPLY AND DEMAND FOR EDUCATIONAL PERSONNEL

October 24-25, 1968
George Peabody College
Nashville, Tennessee

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PREFACE

The CEMREL conference on Supply and Demand came about as a result of interest expressed by various public school, higher education, and state department level personnel in discussion with members of the educational planning component of CEMREL's Education Information Systems. The writer tested this concern by writing letters of inquiry to the commissioners of education in each state in the CEMREL region, to selected deans of education, and to certain school superintendents. The response to this inquiry was very positive.

Members of the conference planning committee determined that the conference would be held in Nashville, Tennessee, October 24-25, 1968, and would be limited to invitation only. It was further determined that the invitation would be only to the members of the state departments of each state in the CEMREL region, deans of education of schools affiliated with CEMREL, plus a random selection of school superintendents of affiliated school systems from the four state area. The invitation was extended in the last week of September.

The appendix of this proceedings includes a list of those individuals who expressed their intent to attend the conference. We have also placed in the appendix of this proceedings preliminary information that was obtained from a brief questionnaire sent to the ten largest school systems in each of the four states in the CEMREL region, plus selected articles that were presented to the conferees.

The major presentations of the conference were both audio and videotape recorded and are now available upon request. The audio recordings were then transcribed and those transcriptions are the basic content of this proceedings. The presentations appear in this conference proceedings in the order in which they occurred at the conference proper.

THE FUTURE AND EDUCATIONAL PERSONNEL DEVELOPMENT

Dean Corrigan
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It's a pleasure to participate in this conference and have the opportunity to discuss this particular topic with this group. The division I represent in the Bureau of Educational Personnel Development is a new division called the Division of Program Resources. The functions of this division include visiting people in the field, participating in meetings, sharing ideas about the directions education might take in the future, and seeking ideas from various groups on the recommendations they'd like to make regarding the Bureau of Educational Personnel Development. The Division of Program Resources is not involved directly in the approval or disapproval of proposals; its function is not to read proposals and evaluate them; it is a division that is charged with identifying some of the creative developments taking place around the country in education and then to feed these ideas to other divisions of the bureau and/or other bureaus within the Office of Education which are responsible for related programs. And, as we come into the field like I am doing tonight, we hope to identify ways that schools, colleges, regional educational laboratories, and other community education and social agencies can utilize the full potential of the Education Professions Development Act. This kind of wide open role gives me an opportunity to express my ideas without necessarily suggesting that they are in any way the party line. In fact, it might be that tomorrow night or next week you'll hear someone else from the Division of Program Resources who might express a different point of view on the future and educational personnel development.

What I'd like to do first is to change the procedure that most speakers use. In order to set the tone for what I'm going to say, I would like to tell you all the stories I would ordinarily tell in my presentation at the beginning. Then I'm going to ask you to draw out the point in these stories and apply them at the most appropriate time, sometime later on in my presentation. I'd like to do this for a couple of reasons--one is that it'll keep you with me I think, and if you're not with my speech you'll be creating your own on the basis of the stories; secondly, one of the things I am going to talk about is individual differences or what I call the intellectual personal uniqueness, because I think everyone in the room will probably get a different meaning out of each story on the basis of his own personal experience and background.

Let me tell the first one. This is a story on myself. I want to tell it because it dramatizes that pointing in new directions in education is risky business. When I was a youngster I lived in a small town in New

Hampshire. When I was called into the Army I had to report to Fort Dix, New Jersey. To do so I had to go through the Port Authority bus terminal. This was the first time I had ever been in New York City. If any of you have been in New York City and seen Port Authority bus terminal, you realize that for a youngster coming out of the hills of New Hampshire, trying to find a bus in Port Authority was quite a challenging experience. As I recall it, it seemed that that day everybody else in New England had arrived there at the same time I had; anyway I was having some difficulty finding this bus. So I went over to a news counter, and as I extended my arm and pointed to my left I said, "Say mister, is this the way you go to get the bus to Fort Dix, New Jersey?" He didn't pay any attention to me; he kept right on working. So I took a nickel out of my pocket, and I rapped on the counter a little, and as I rapped on the counter he looked up as I pointed again, and I said, "Say mister, is that where you go to get the bus to Fort Dix, N.J.?" He looked me right in the eye, and this is what he said. "Look buster, don't point unless you know where you're going." Well, that kind of an experience, if you think about it, will make you kind of humble about pointing at things. I'm going to be pointing my finger tonight, so I hope you'll keep in mind that these are only my ideas, and as I point I do it with a realization of what I'm doing.

The second story isn't really a story, I guess. It is a section of a book that has something to say to us, especially a group like this. It's from a chapter called "Create Dangerously" in a book by Albert Camus titled Resistance, Rebellion, and Death. The point Camus makes in this chapter is something that is a good fundamental point for us to keep in mind as we begin this conference. He says that the thing that makes life today so different from any other period in history is that we no longer have the privilege of not acting, especially those of us who find ourselves in positions of educational leadership like the people in this room. His comments are directed at the role of the modern artist, but I think his message applies to anyone who's charged with trying to communicate ideas to people, anyone trying to help other human beings move toward new directions. I think the point he makes is relevant to anyone who sees himself as trying to make a better world, trying to work with teachers or administrators or children in terms of communicating a better life. His point that there's no choice except to act is based on his idea that we now know the way things are--whether we want to or not. The front pages of the newspapers and TV bring the Report of the Commission on Civil Disorders, the news that Robert Kennedy is shot, the news that a boy from the home town has been killed in Vietnam. We all know, and once knowing and not acting is in fact an action, because we choose not to act.

The next point comes out of the little book called The Gospel According to Peanuts. There is a series of cartoons in this little book that I think have meaning for us. In the first cartoon in this series of three cartoons Lucy is saying to Charlie Brown, "Charlie Brown, do you know what's wrong with you?" And in the second cartoon there's no caption, just Charlie Brown looking at the ground. In the third cartoon, this is the caption, "Charlie Brown, what's wrong with you is you don't want to know what's wrong with you." Remember now, at some time later on you're going to have to apply these at the most appropriate moment.

Now let me relate to you the two most interesting things I've heard students say recently which I think have great meaning. Both of these students were high school kids. The first student I want to refer to is a student who has just participated in a live-in that had been set up between a suburban school that was an all-white, racially isolated school and a school in the inner city of Rochester, New York--Madison High School, in which about 60% of the students are Negro. The student is a leader in a group called the Student Union for Integrated Education--a group of about 180 kids from 17 Monroe County districts surrounding the city of Rochester. The group emerged from some problems of democracy exchanges in which suburban and city kids visited each other's schools to have afternoon conferences and discussions. However, they decided that this was just not enough; they just would get to know each other in these one-day deals, and they had to stop their discussion. So these kids got the idea that they ought to have a "live-in." Twenty-five kids in the suburbs would go into the city and live for a week with the kids in the city, and 25 kids in the city would go out to the suburbs, live in the homes, go to the school, and even swap teachers. Well, they did this. However, they didn't do it without a great deal of work and opposition. The students had to present their plan to the Board of Education. The first time they presented it, the Board turned it down because they didn't have all the details worked out--who would handle the buses, the chaperones, and all this stuff. But they finally got the approval of the district, and they did it. And it worked very well, and now several other districts have participated in the "live-ins." The statement made by one of the students which I think carries a message was made by the student when he reported to the Board of Education after the "live-in" experience. This is what he told the Board as 600 parents listened: "You know, this has been a wonderful experience for me, because it's really the first time I've ever gotten outside my cocoon." As you stop to think of it, our school is really irrelevant. It has prepared us for the best of all nonexistent worlds. We study the Chinese dynasties and the Boxer Rebellion while Detroit burns. The best way to prepare us for the future is not to hide us from the world.

The second thing I've heard a student say in the past few weeks was on one of the TV talk shows. A group of kids were sitting around on the floor talking with this news commentator about what was wrong with society, what they thought needed to be improved. One little guy who couldn't have been more than four feet tall was sitting on the floor, and the camera kept focusing on him while everyone else was talking. You could see he was with it, but he wasn't saying anything. However, he was thinking all the time. Just before the end of the program he decided he was going to have his say. This is what he said: "I think what's wrong with our schools and what's wrong with our society is that we really don't have enough chance to ad lib." His statement caught the news commentator by surprise and took him a little aback. In response he said, "What do you mean, you don't have enough opportunity to ad lib?" And so this little guy gets up to explain, "Well, I happen to play in a jazz group. You know jazz is a wonderful thing, in fact, jazz is one of the most distinctive contributions of this country; it's American. Another thing that's so great about jazz is that when I play my sax, and it comes my turn to play, all it says on the music score is, "You're on your own for the next 32 measures."

I'll tell just one more story, and then I'd like to discuss in more specific terms the future and educational personnel development. This last story with a point comes out of the book To Kill a Mockingbird. There's a passage in the book which many of you may remember, in which little Tommy McDonald doesn't have 25¢ to buy his lunch, and the teacher tries to give him the 25¢. Atticus' little daughter, Scout, is sitting there watching this teacher try to give Tommy McDonald the 25¢, and of course Tommy keeps refusing. Little Scout can't understand why this teacher can't understand why Tommy can't take the 25¢. She goes home that night and while sitting at the dinner table she tells her father about the incident in school. Then she says, "I'm not going back to school; I'm quitting." Upon hearing this, Atticus tries to think what to say, because he knows he has a rare opportunity to teach a great lesson if he can say the right thing at that moment. But he can't think of what to say, so he doesn't say anything right then. After they finish eating, he goes out on the front porch and sits in his old rocker, and little Scout comes out after him and crawls up in his lap. As they sit there rocking, he finally decides what he's going to say to her. He says, "Little Scout, you have learned a wonderful lesson today if you can remember it and act on it. What we all have to do is to put ourself inside the skin of another person and walk around in it for awhile."

With the points from these stories as background, to be appropriately related by you, let me now move to a discussion of some of the changes in society which I believe will confront us in the days ahead and some of the implications of these changes for educational personnel development.

The Next Twenty Years

Although it is possible that schools in the next twenty years will be used as instruments of thought control and social manipulation, I am, nevertheless, optimistic enough to believe there will continue to be a commitment to freedom, creativity, and equality of opportunity. With this basic assumption, I will attempt to identify some of the changes that will take place.

No effort is made to identify all of or even most of the changing conditions which are having, or might be expected to have, an impact on education. I have chosen to focus on a limited number of changing conditions which seem especially pertinent to developments in education in the years ahead. I trust they will suggest others which ought to be considered.

In general my comments could be clustered around two areas of change: The *explosion of knowledge* accompanied by dramatic technological developments and the *explosion of human interaction*.

The Explosion of Knowledge and New Technologies

The rapid advances on our frontiers of knowledge and new technologies have given us almost unbelievable new processes and products which will have the power to enlarge or inhibit the potential of the individual and society.

Obviously there is no way to discuss meaningfully the whole range of new technological developments now taking place or predict completely the future. I merely hope to draw your attention to certain phases of the technological revolution which is already underway and provide some sense of the impact these changes will have on our society and its educational system. Therefore, as examples, I will focus on just two areas of the new technology: (1) *systems analysis* and (2) *cybernation*.

Systems Analysis

Management has already invented technologies to carry on mammoth research and development programs. This technology is especially dependent on systems analysis, long-range planning, operations research, and other sophisticated methods of attaining and evaluating efficiency. It was first applied to the development of strategic weapons, then to space exploration, and now to undersea exploration. One partial but powerful expression of this approach is found in the program budgeting and planning methods first used in the Pentagon and now, at the Presidential insistence, being hesitantly and falteringly applied to activities throughout government agencies, including the Departments of Labor and Health, Education, and Welfare. It is currently being used by the Rand Corporation under contract with the City of New York in a study of the nation's largest police and fire departments. Because systems analysis purports to--and sometimes does--provide a basis for demonstrating the costs compared to the benefits of alternative packages of projects aimed at particular programatic goals, it permits in principle much tighter and efficient implementation, control, and evaluation of large-scale social innovations.[1] There is no reason to believe that it will not be applied in the future to reorganizing transportation and communication systems, to city rebuilding and to new city building, and to planning and operating educational systems.

Cybernation

Another recent area of technology with far reaching implications is cybernation, that is, the use of automation and computers.

Diebold, the coiner of the term automation, provides a brief description of what changes the computer will bring into our lives.[2]

> If we can overcome our fears and put automation to work effectively--a big if--we will open the way to a world such as few can imagine. Here are samples of what to expect.
>
> By Century 21, currency probably will be used only for incidentals. Instead of taking home a paycheck, we may have a central account to which our employer's computer automatically credits our salary. All of our purchases at stores, markets, theaters, restaurants, and so on will be automatically debited to our account at the instant of purchase.
>
> New systems for the handling of information will soon affect everyone. The library will become a central store of information which will be available at any point in the country by means of data-communications systems. When we need particular information, we will simply dial a code number, and information retrieval machines will project the material on a screen or produce electronically prepared copies.

Information storage and retrieval systems will also be used in medical diagnosis and research. A running record of each patient's history, kept in electronic form, will enable doctors to spot disease symptoms or tendencies long before they could be discovered by conventional methods. If we become ill while traveling in any part of the world, a physician will be able to dial a record-storage center and in seconds have our complete medical history.

"Perceptron," a pattern-recognition device now under development, can distinguish between letters of the alphabet, identify objects, and recognize faces. Machines have been taught to play checkers and blackjack and have defeated the men who taught them. The most revolutionary research in automation today is being done in what is called heuristic, or self-adaptive, systems. Some of these machines are "goal-oriented"--they can be programmed for a certain goal, and they will keep trying new approaches until they work out the best one. They improve their own approaches as they go along and will be able to cope with entirely new conditions which may be unknown to the intelligence that built and programmed their electronic innards. Most of the publicity concerning heuristic machines has been devoted to their game-playing abilities, but much of the research being done here and in Russia is top secret. Both governments know that the next great scientific breakthrough might come in this area.

These machines have special importance in the space program. When the first unmanned spaceship goes to Mars, for instance, no one can predict all the conditions it will meet. But the spaceship's heuristic system could be given goals of landing, exploring, and returning, and it would accomplish the mission in the best possible way, adapting itself to whatever conditions it would encounter.

Many other technological innovations are now taken for granted and are only awaiting financing and public acceptance. On the electronic highways of the future, we may dial a destination and let our computer-controlled car pick the optimum route and do the driving. Teaching machines will pace a student's progress, diagnose his weaknesses, and make certain that he understands a fundamental concept before allowing him to advance to the next lesson. Computers will enable a businessman to simulate and test the alternatives of a decision before he actually enters into a deal. And the State Department will be able to feed the factors of a ticklish international situation into a computer and learn the probable consequences to each of a wide range of decisions.

General Implications of the Knowledge Explosion and New Technology

There are many consequences which one can interpret as a result of the explosion of knowledge and accompanying technological revolution.

In the first place, all of those whose work is not fundamentally creative are the potential victims of cybernation. So compelling are the economic reasons for its use that only a major social disaster will slow its usurpation of routine activities.

In the second place, in order to use computers effectively as tools in the instructional process as well as in other activities, it is mandatory that we speed our efforts to learn more about learning and teaching. Thomas James, dean of the School of Education at Stanford, identifies the problem and the challenge when he says that "present applications of the new technology put the cart before the horse. Instead of the new education-industrial complex dumping $50 billion worth of junk on the education market, instead of money for machines, the complex needs to first spend a lot more time and money on the nature of the learning process."[3]

A third consequence which needs to be considered is that our society's problems will become more complex, and we will, of necessity, have to use computers to simulate social and physical processes which an individual or group could not understand without the aid of systems analyses. We already have examples of this in the space program and the development of this country's weapons system. Increasingly, the proposed solutions to social problems will be statistical solutions, partly because the techniques for dealing with statistical data will be readily available.

There are, of course, inherent dangers in this approach. What worries me most is that when judgments are based solely on the ability to simulate reality and analyze it statistically, the human being--the point of the curve--can become an annoyance. We will have to work hard to make sure that the emphasis on machines and man stay in balance.

A fourth implication of the knowledge explosion is that as a people and an electorate we will be called upon to make judgments about increasingly complex matters. We already see them today in such issues as the Vietnam war, the common market, nuclear testing, fallout shelters, space exploration, water pollution, civil rights, and so on. But, at best, the most capable of men can fully understand only a small sector of the circle of knowledge applicable to such decision making.

As a shrewd observer of the American scene has stated it: "The nature of modern life calls for studies that are generalizable, that is, that can explain a wide variety of life situations. Such studies tend to be theoretical and abstract. But the more theoretical and abstract they are, the less suited for common education. What everyone seems to need is precisely what everyone is not equally able to learn."[4]

It would seem, then, that as time goes on we will be increasingly confronted with a paradox--that of gaining comprehension of the incomprehensible. The enormous complexity of social issues and the increasing abstruseness of the techniques for dealing with them will confront education with its greatest challenge. How will we educate to make people comfortable with, sensitive to, and aware of these complexities? How will we teach people to understand their relationship to long-range planning? And how will we teach people to be comfortable with, indeed, to embrace change and the process of change?

Mead captures the educational implications of the new technology when she states, "...to the multiple functions of an educational system we must add a quite new function: education for rapid and self-conscious adaptation to a changing world." She further sharpens the problem by stating what she calls the "most vivid truth of the new age. No one will live all his life in the world into which he was born, and no one will die in the world in which he worked in his maturity."[5]

Very much the same point of view is expressed by Drucker when he says, "Since we live in an age of innovation, a practical education must prepare a man for work that does not yet exist and cannot yet be clearly defined."[6]

Obviously the larger educational task implied by such writers is only partially that of the schools and colleges. A visit to American business and industry will quickly show us that formal education is no longer the exclusive province of the American educational system. Programs, facilities, instructional procedures, outcomes, and budgets provided for educational activities are now just as much the concern of business and industry. Those of us with direct concern for our educational system must accept the fact that our elementary and secondary schools and our colleges will be part of a complex of continuing education for a large majority of our people. The learning force will soon exceed the work force.

An extraordinarily important realization emerges from the notion of continuing education to keep up with rapid changes in all aspects of life; that is that no one will ever "complete" an education. We have had the concept of continuing education around for a long time, but in former years this meant that an individual had responsibility to continue his personal development on his own. In the future he must find a formal educational structure available to him. Education must prepare him to take advantage of new opportunities, as well as help him to face the insecurities of the changing society promised him as a way of life. Sixty million jobs will change in character in the next generation. Six year olds now starting school can expect their vocations to change three times during their lifetime.[7] Skills will obsolesce and facts will wear out at a more rapid rate. What will be most worth learning will be mainly the knack of learning itself.

There is another side to the matter. At the same time that we concentrate efforts on preparing people for productive places in our changing economy we must recognize that man as a worker is becoming obsolete. However the work of society may in the future be distributed, it is certain that most of the potential productive capacity of our population will not be needed to keep the economy functioning at a very high level. Under such conditions, a man's identity and importance will derive not from the kind of work he does but from the kind of life he leads. Education will thus have to include in its objectives not only preparation for a life of work but also the primary work of life. Buckminster Fuller has put it very aptly in his phrase, "Learning a living."

The Explosion of Human Interaction

Education for "learning and living" is tied directly to the second explosion which has far reaching implications for education in the next twenty years: the explosion of human interaction.

The sheer growth and location of the population, the demographic characteristics of this country in the two decades ahead, will profoundly affect our educational system. We expect around 230 million people in the United States by 1975, about 250 million by 1980--and a world population of four billion by 1977. By 1970 young people will make up about half of our population, and by 1980 those over age 65 will have increased by almost 30%--

unless the toll from smoking, auto accidents, etc., is unexpectedly high. By that time, too, approximately 80% of all Americans will be living in urban areas. Cities now separate will be merging into megalopoli stretching from Norfolk to Bangor, from Minneapolis to St. Louis, from San Francisco to San Diego. Thus, during this period the very idea of the city will alter as physical mobility becomes ever greater and communications ever more accessible.[8]

Faster means of transportation and communication have already intermingled the ruralite with the urbanite, the northerner with the southerner, the free with the less free, the economically privileged with the underprivileged, the black with the white. The current situation was aptly described at the United Nations by Ambassador Adlai Stevenson shortly before his death when he said: "The world is now a crowded house." It indeed appears to be so. Everything we do is observed, everything we say is overheard. The walls are thin and the connecting doors are open. Opposed value systems and mores rub abrasively against one another, no longer separated by the traditional barriers of distance and time. Today what white Mississippians and Negroes in Detroit value and how they react as a result of these values matter tragically to all of us.

The world for young people too is crowded, perhaps even more so than for their elders. Travel, radio, moving picture, television, books, new families in the neighborhood from other sections and lands, "different" children who enroll at school--all bring into view of children and youth a wide range of choices in human behavior. Direct confrontation with this wide range of choices calls into question personal values and community mores.

General Implications of the Explosion of Human Interaction

Young people and adults need help now and will need help in the future in the development and clarification of values--that is, beliefs that are chosen after deliberation, prized, called upon repeatedly in everyday living, and openly affirmed when challenged. It seems fair to state that the need for direct attention to values clarification and development in our schools and colleges will increase as our crowded house becomes more crowded and as our interactions become ever more complex. The educational system of the future, in addition to teaching how to use the new technology most effectively, will have to develop effective means for teaching those human characteristics of brotherhood and empathy that will become increasingly important.

As indicated earlier, the computer is critical for much of the physical and social systems management technology. And it can also provide the technology for teaching four and five year olds to read. Note, however, it does not provide teachers and parents with the moral and ethical wisdom to help these youngsters to interpret the significance and values inherent in what they read. This powerful technology for predicting and influencing behavior may come just in time to rejuvenate the democratic processes--or, irresponsibly applied, it may totally destroy them.[9]

In summary, a look ahead to the next twenty years calls for a new emphasis on the learning needs of each individual. The one need all will share is to learn how to inquire--how to develop ways of knowing--and what is worth knowing. In a world rocked with change another learning will be most crucial. Individuals will need to develop a high capacity to adjust to changed circumstances--a high capacity to innovate. And last, but not least, in a computerized shrinking world, individuals will need to continue to learn ways to live together peacefully as human beings.

The Intellectual Personal Uniqueness of Human Beings

Let me now discuss the second source of knowledge for use in guiding our decisions of educational personnel development--the intellectual personal uniqueness of human beings. We tend, too often, to categorize people in terms of achievement scores, IQ's, Miller analogies scores, college boards, etc. We place human beings on a chart in various groups identified by a symbol and we send out these charts to other people to use to make judgments about the people listed. We know we can't really do this to humans--a person is aperson--a subject, not an object. I use the terms intellectual personal uniqueness rather than individual differences to dramatize this fact. We're all different in terms of what we know about any given subject matter--we're different in terms of our ability to think in the abstract about art, math, English, etc. We're all at different levels in ability to think in the abstract about any phenomena. We're also different in how we approach learning. The psychologists refer to this as "learning style." Some of us can keep four or five ideas in order at any one time--others of us can keep only one thing in mind at one time. Some of us have to take longer before we embark upon a project than others do. Some of us can jump right into it. Some of us can learn things through manipulative means, non-verbal means, much better than we can through verbal means.

Let me give you a specific example of what I mean: Kodak is doing exciting things right now with inner city kids--these kids who are considered non-verbal, especially when judged by middle class teacher norms, are given 8mm cameras and all the film they want. Then they are freed to tell their stories through film. I wish you could see some of the creative films these kids have made. Experiments like this make me more and more convinced that if we can find the best way to teach people, we can help them learn. If we can find ways to meet each learner where he is--not only in terms of where he is in what he knows, but in terms of his approach to learning--we can make new discoveries that will "unlock" the world of knowledge for many children whom we have failed in the past. The third aspect of intellectual personal uniqueness is that which the psychologists refer to as the "affective domain." If we really believed what I'm going to say about the importance of personal relationships in the education of human beings, we would change our schools completely. Each learner and each of us in this room is unique in how we feel about what we know, how we feel about what we need to know, how we feel about the teachers who are teaching us, and how we feel about our peers. Everyone in this room knows that what is reflected back in the eyeballs of a person who's trying to teach us something has a tremendous influence on what we'll be able to learn in that particular setting. This point is vividly demonstrated in a new book Pygmalion in the Classroom. It reports the studies that Rosenthal, a professor at Harvard, did in which he changed the records of the kids--a group of so-called "slow learners" and identified them as "late bloomers." The teachers approached these kids in an entirely different way in terms of their expectations. Read the book and see what dramatic changes occurred in their new supportive environment. One of the most meaningful learning experiences I have ever had was when I worked with a team interviewing 2,000 students who had dropped out of school. The overriding significant factor in the whole study, the basic correlation was not with IQ or achievement; it was that the kids who dropped out didn't like themselves. They didn't like themselves and they didn't think their teachers liked them or that their parents liked them. If we really believed in the importance of personal dimensions--human feelings--what an impact it could have on the schools and the way we prepare educational personnel.

Let me ask you a question--How many classes have you ever had in your own education in which people just asked a question right out loud simply because they wanted to know something they didn't know? Have you ever been in a class where a student prefaced his question by saying, "You know, I don't know a damn thing about this, but I'd really like to know something about it." How many of you have experienced a learning environment in which students really revealed all the things they didn't know? In any of your graduate classes has anyone asked a question that they didn't at least know enough of the answer to know that it was a so called "good question"? A basic essential to the creation of a learning environment which is productive, one which starts with each person where he is, is the freedom to share what one does not know. If we build a whole system in which a person can't admit where he is, then the system cannot work. Our schools are presently set up to produce "winners and losers." So many of our kids are doomed to failure before they start. We're going to have to change that if we really believe the school's primary purpose is to help all the children of all the people to develop as unique human beings in terms of their capacity to grow.

About 50% of the Negro kids in our major cities in this country never complete high school. The average Mexican American child in the Southwest drops out of school by the seventh year. In Texas, 89% of the children with Spanish surnames drop out before completing high school. We have not yet developed a system of education in which school and college teachers and administrators are accountable to the client. Educational personnel in schools and colleges ought to be accountable for the intellectual development of all children, not just the children of the rich and powerful. In my view, the client is the learner. Schools ought to be built for learners. If 50% of our clients drop out or are pushed out, we have to begin to become accountable for that. About two months before Senator Robert Kennedy was killed, I heard him say to a group of school superintendents and board of education members, "Look, if people of all races start at the same level in terms of their unequal abilities to develop and 50% of one segment of our society as compared to 22% of the other segment of society do not complete school, then we ought to ask some questions about it. If 50% of a doctor's patients died, we'd begin to worry about the competency of the doctor. We wouldn't keep blaming it on the patient all the time."

Implications for Educational Personnel Development

Let me now move to a discussion of some implications of these two sources of decision making (1) the explosion of knowledge and human interaction and (2) the intellectual personal uniqueness of human beings. They imply dramatic changes not only in the realignment of personnel we now have in schools but the development of new kinds of educational personnel not found in current staffing patterns. There will be a need for new kinds of teaching specialists as educational personnel develop the kind of schools which take each learner where he is and provide a continuous progress program for him.

Teaching Specialists for the School of Tomorrow

Let me suggest just a few of the new types of teaching specialists that I think we will find in some of the schools in the future. To the usual specialization areas of subject matter and age level will be added a variety of specializations which will focus less on the teacher as a content specialist and more on the teacher as a specialist in the nature and use of learning resources. Teaching staff in the school of tomorrow will include research associates, learning diagnosticians, visual literacy specialists, computer-assisted instruction specialists, systems analysis and evaluation experts, specialists in simulation and gaming techniques, information systems and data base designers, community resource specialists, and learning process facilitators.

We'll have schools that will be constituted basically of teaching teams. These teams will include a variety of personnel with diverse talents such as those listed above. These specialists will not only work with children, they will work with other teachers, too. For example, there will be personnel who can help interpret research in useful ways--in terms of what the research means for learning and instruction. By the way, I think the emphasis in research is going to change too, especially in terms of being reported in practical terms. There is already a new concern for developmental research and utilization of the research.

We'll have in our schools associates in teacher education who will be given dual appointments in neighboring colleges. In fact, a new view of the College of Education will emerge. It will no longer be just a place on a campus--it will incorporate many avenues for training and research. (See figure 1, page 13). The combine will include schools, colleges, and a wide variety of community, educational, industrial, and social agencies in which a variety of adjunct faculty from these interdependent institutions will participate in research and training. We already have many of the adjunct faculty types in our schools and colleges now, for example, clinical professors and clinical associates. I use the term associate in teacher education here to identify all these types.

We'll also see new kinds of curriculum specialists in schools--not from the central office--these will be people on teaching teams. The Temple City, California, program of differentiated staffing includes personnel who fill the role of curriculum associates. These people are not supervisors who come down from the central office to tell teachers what to do or evaluate teachers in one or two-day-a-year visits. The curriculum associate will work within the teaching team as consultant and demonstration teacher for the various members of the team. If you want to see another school with personnel filling this role, go to the new Hilton Elementary School, N.Y., where the teachers selected four other teachers as curriculum associates. These teachers are primary resources for pupil team-learning techniques. They produce and demonstrate self-instruction kits which can be used by the kids individually or in pairs.

CENTERS OF LEARNING
A RECONCEPTION OF A COLLEGE EDUCATION

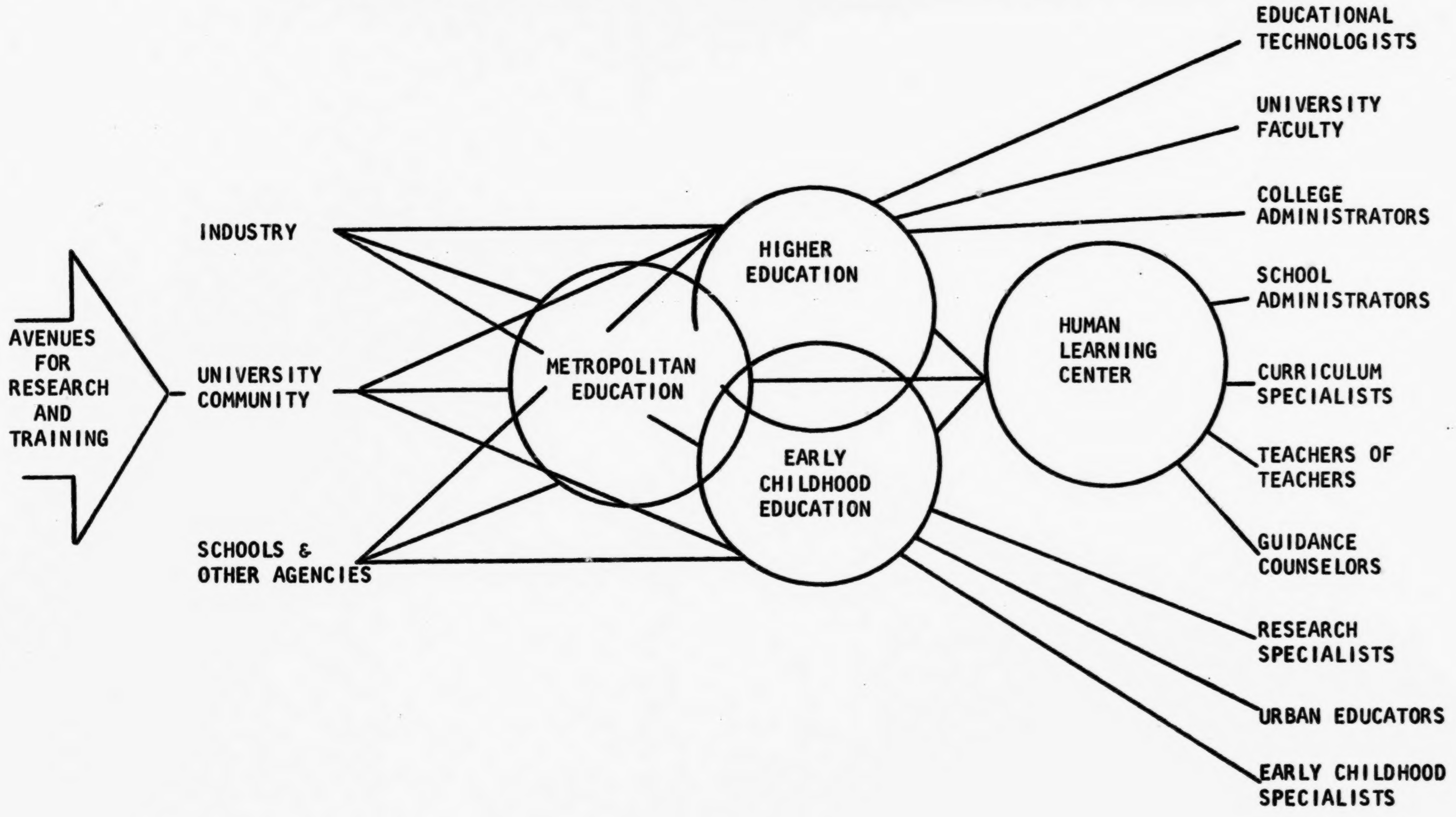

AVENUES FOR RESEARCH AND TRAINING
INDUSTRY
UNIVERSITY COMMUNITY
SCHOOLS & OTHER AGENCIES
METROPOLITAN EDUCATION
HIGHER EDUCATION
EARLY CHILDHOOD EDUCATION
HUMAN LEARNING CENTER
EDUCATIONAL TECHNOLOGISTS
UNIVERSITY FACULTY
COLLEGE ADMINISTRATORS
SCHOOL ADMINISTRATORS
CURRICULUM SPECIALISTS
TEACHERS OF TEACHERS
GUIDANCE COUNSELORS
RESEARCH SPECIALISTS
URBAN EDUCATORS
EARLY CHILDHOOD SPECIALISTS

Figure 1

The associates go to teacher classrooms and help them by joint demonstration teaching or providing specific resources.

In the future we'll have people in the schools on the teams who know enough about diagnostic devices and skills to help diagnose the learning needs of each child. We'll have people who can help us develop individual profiles on all students such as the profiles developed in the Individual Prescribed Instruction (IPI) Project at Pittsburgh. There they produce a diagnostic profile on each child in terms of where he is and what he is capable of doing next. The data reflects not only what each child knows but information on each child is coded in terms of his "style" of learning as well. The curriculum builders in the IPI Project have identified 4200 alternative ways that teachers can teach a math program based on 26 mathematical concepts at 9 different levels of abstraction. Now you say to yourself, how can a teacher possibly keep track of 4200 possible alternative lessons? They can't without the help of technology. What they do is get the diagnostic information about the children and feed it into the information system which provides them with appropriate alternative lessons.

We'll have people in schools who are not only trained in English and oral and written composition, but personnel who can help discover learning needs and problems in the area of visual literacy. One school I know about has two specialists who are trained in this field--people who can identify the visual perception problems of students. They use diagnostic instruments developed by Marion Frostig. What they've discovered is that many children who have reading difficulties are children who have visual perception problems such as a reversal problem, seeing words backwards. Another type of visual literacy specialist is the person who knows visual learning resources. This specialist is available to help teachers and students communicate more meaningfully through non-verbal means. There will be a need for many new personnel with this kind of specialty. Computer-assisted instruction specialists are especially needed right now; now the technicians--the machine men--especially needed are the programmers, people who can write exciting programs for use in the machine. As in any learning tool, TV or radio or anything else, it isn't the machine or how beautiful the machine is, it's the kind of programming that's put into it and whether or not the kind of intended learning objective can be accomplished at all by the computer. Some can. For example, a number of colleges have written programs in basic educational measurement and statistics. These colleges are waiving the usual requirement of taking a course for a whole semester on the basis of a proficiency exam passed after taking a computer-assisted instruction course. Some people finish in 2 weeks at their rate--some people take 4, some others 5. There is much to be said for the idea of utilizing the technology to help us help people move at their own rates of development. Instead of having to repeat what they already know.

Personnel skilled in systems analysis will be needed--people who can help us tie together all aspects of the total instructional system, people who can help us interrelate the content, organization and methods, materials, and evaluation aspects of the education process in ways that produce the most effective learning for each student.

The potential of simulation and gaming will call for new personnel. Simulated materials will be developed in which a person is placed in confrontation situations that are drawn from the real world. Through simulation, educational personnel will be challenged by alternatives and consequences which they will face in real situations. The kinds of simulated materials developed by University Council of Educational Administrators (UCEA), the administrative in-basket programs, and those now being developed for use in schools, particularly in the social sciences, are examples. And Don Cruickshank, University of Tennessee at Knoxville, has developed a Teaching Problem Laboratory based on seven persistent problems of beginning teachers. The laboratory simulates an actual classroom in which the teacher-to-be is challenged by the problem areas that beginning teachers ordinarily face. The laboratory has been used effectively as one type of sensitivity orientation before the students go out for student teaching. It seems to offer another excellent way to make methods of education more meaningful.

In New York State we have a new law, the Taylor Act, which requires that teacher organizations negotiate directly with boards of education. The teachers select a bargaining agent, a representative association--in most cases the AFT or the NEA. A professional negotiator from the teachers group deals directly with the board; the superintendent is a consultant to both groups. If teachers are going to be in such positions, they had better be trained for them. For instance, if an art teacher is to be selected as the bargaining agent by the teachers association, we'd better develop some program that will offer him preparation as a professional negotiator. The teacher negotiator of the future will represent his professional association on issues which go way beyond shorter hours and more pay. As one looks at some of the negotiations packages developed by teachers association in New York State, the new role of teachers as professional decision makers unfolds. The Greece Teachers Association of the Central School system, for instance, produced a 45-page listing of items to be negotiated this year. The issues deal with everything from the reading program to school integration.

We're also going to see the day when we'll have community liaison personnel in schools. We're going through the throes of developing what this is all about now in many of our cities. We'll have parents serving in classrooms assisting teachers with setting up home visits, personnel who identify new families moving into the neighborhood, personnel who orient new parents to the school and other social agencies, personnel who can serve as troubleshooters to arrest students before they drop out of school, personnel who can relate to the ghettos and identify community needs. These liaison roles will become increasingly important as the schools, in certain areas, take on the characteristics of community service centers. The field is also wide open for new liaison personnel who will work with other educational agencies. Some school staffs now include representatives from educational technology industries and learning systems corporations. As a result of my acquaintance with people in the educational technology industries, I am convinced that a new system of ideas and resources can be developed that will be mutually beneficial to the schools and industry if these new relationships are rooted in the improvement of learning for all children.

Inclusion of the new types of teaching specialists mentioned will bring about differentiated staffing patterns in the schools. Most of the aforementioned personnel would fall into the category of teaching specialists within a differentiated staffing team. This kind of staffing plan does not necessarily suggest just a hierarchical system. The ultimate staffing plan could have both vertical and horizontal arrangements for differentation relating to function, compensation, and decision making. The basic point made here is that new kinds of schools will create the need for a wide variety of personnel, performing specific functions that will meet the learning needs of each student. Some of these new specialists are highlighted in Figure 2, page 17.

To implement fully the concept of differentiated staffing, teaching tasks must be appropriately analyzed and their components assigned to personnel uniquely equipped by training, experience, and motivation. It will be necessary to assess the degree to which every task is being carried out and the extent to which the system's educational objectives are being met. Thus, the complexities of the instructional tasks that are performed must be systematically differentiated and made more manageable in order to assure an individual's competence in a specified teaching role. The success of differentiated staffing will depend, in a large measure, on the profession's ability to spell out intended learning objectives and the required personnel and performance levels necessary to achieve them.

As the general public and teachers themselves realize that teaching roles are not all the same, and that each functional role requires different professional knowledge and skills, a clearer image will emerge of the teacher as a professional. Teachers will receive professional pay and status on the basis of the knowledge they possess in their specialty and the competence they demonstrate in performing clearly defined specialized roles as members of a teaching team designed to work with learners as unique human beings. Once the roles are defined in the school context, it will be a complex task to assign priorities and values to the functions and levels of competence, but it must be done.

These issues and many others will have to be resolved as school staffs become organized around teaching teams made up of a variety of specialists who teach and assist each other, as well as teach and assist students. As new concepts of the school of the future unfold and the total community becomes a laboratory for bringing social relevance to the curriculum, new thinking about educational roles should become more acceptable.

Changes Needed in Teacher Education

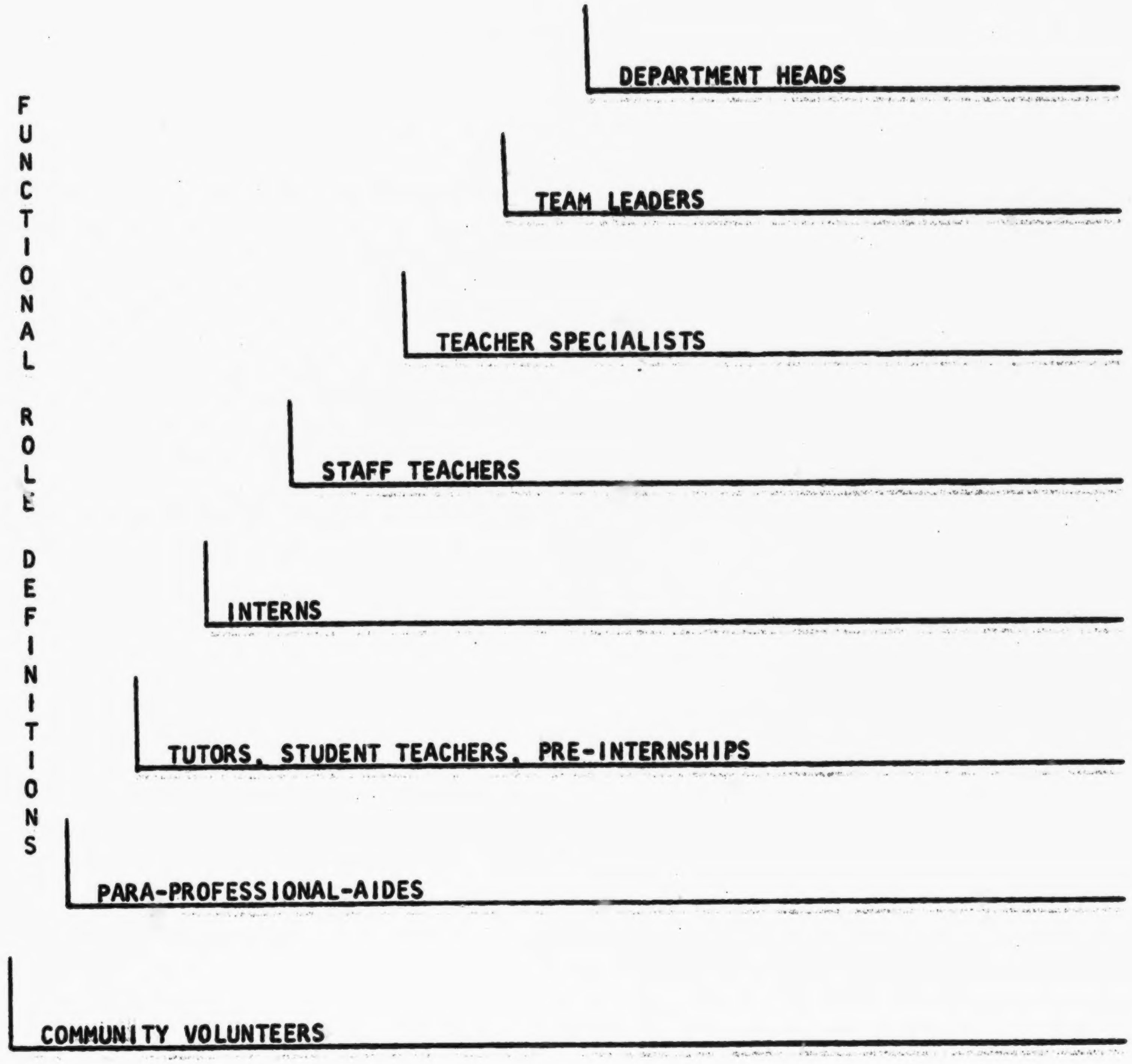
Such a reconception of the school and the kind of educational personnel needed to make it successful will require dramatic changes in teacher education institutions. If beginning teachers, career teachers, and a variety of auxiliary personnel are to learn the aforementioned specialized roles, they will need the flexibility to move through different experiences that cannot be pressed from one mold. In order for educational personnel to foster inquiry and self discovery they must learn both and exemplify both in their own educational lives. Therefore, the colleges of the future must become demonstration centers of the value of the personalization of instruction and learning. Teacher education institutions will be required to develop flexible instructional organizations that allow personnel to move in and out of systematically designed teaching specialist programs. (See figure 3, page 18 for general groups of educational personnel who will work in schools of the future.) It should be kept in mind that differentiated

SOME EXAMPLES OF TEACHING SPECIALTIES IN FUTURE TEACHING TEAM PLANS

- RESEARCH ASSOCIATE
- ASSOCIATE IN TEACHER EDUCATION
- CURRICULUM ASSOCIATE
- DIAGNOSTICIAN-LEARNING AND TEACHING
- VISUAL LITERACY
- COMPUTER ASSISTED INSTRUCTION
- SYSTEMS ANALYSIS AND EVALUATION
- SIMULATION AND GAMING
- PROFESSIONAL NEGOTIATOR
- LIAISON-COMMUNITY, INQUIRY, SOCIAL AGENCIES

Figure 2

EXAMPLE OF DIFFERENTIATED STAFFING PLAN


FUNCTIONAL ROLE DEFINITIONS
DEPARTMENT HEADS
TEAM LEADERS
TEACHER SPECIALISTS
STAFF TEACHERS
INTERNS
TUTORS, STUDENT TEACHERS, PRE-INTERNSHIPS
PARA-PROFESSIONAL-AIDES
COMMUNITY VOLUNTEERS

MMUNI

Figure 3

approaches in training will have to be planned to prepare personnel for teaching specialities within each of the groups listed in the differentiated staff plan, Figure 3. One instructional organization for teacher preparation which would complement "differentiated staffing" and the "career ladders" concept of educational personnel development is illustrated in Figure 4 on Page 20.

It should be noted that even though I use the terminology liberal education, special education, and professional education, I do not consider them separate areas functionally. In my view, a teacher-scholar draws upon all of these areas in the act of teaching and in his other professional roles. They are used mainly because they are familiar ways of discussing teacher preparation.

The proposed instructional organization would include the following phases:

1. A point of entry to occur when the student decides he wants to become a teacher. This point would undoubtedly occur most often somewhere in the first three years of college, especially if the college of education offered beginning college students introductory experiences to provide an understanding of the act of teaching and knowledge of the field of education. Students could participate in these experiences without initial long term commitment being expected from them as a result. Formal entry to the program then would be preceded by introductory confrontation experiences, some experiences in the liberal arts, identification of a subject field of special interest, and courses in behavioral sciences and humanities. In some cases early learning about the complexities of teaching might occur in elementary or high school in youth-tutoring-youth programs, community centers, storefront schools, educational parks, etc. These programs can all be used to help a student learn what he needs to learn to become a teacher and to give the student an opportunity to test his level of interest in and commitment to a career in teaching, and his readiness for such an experience.

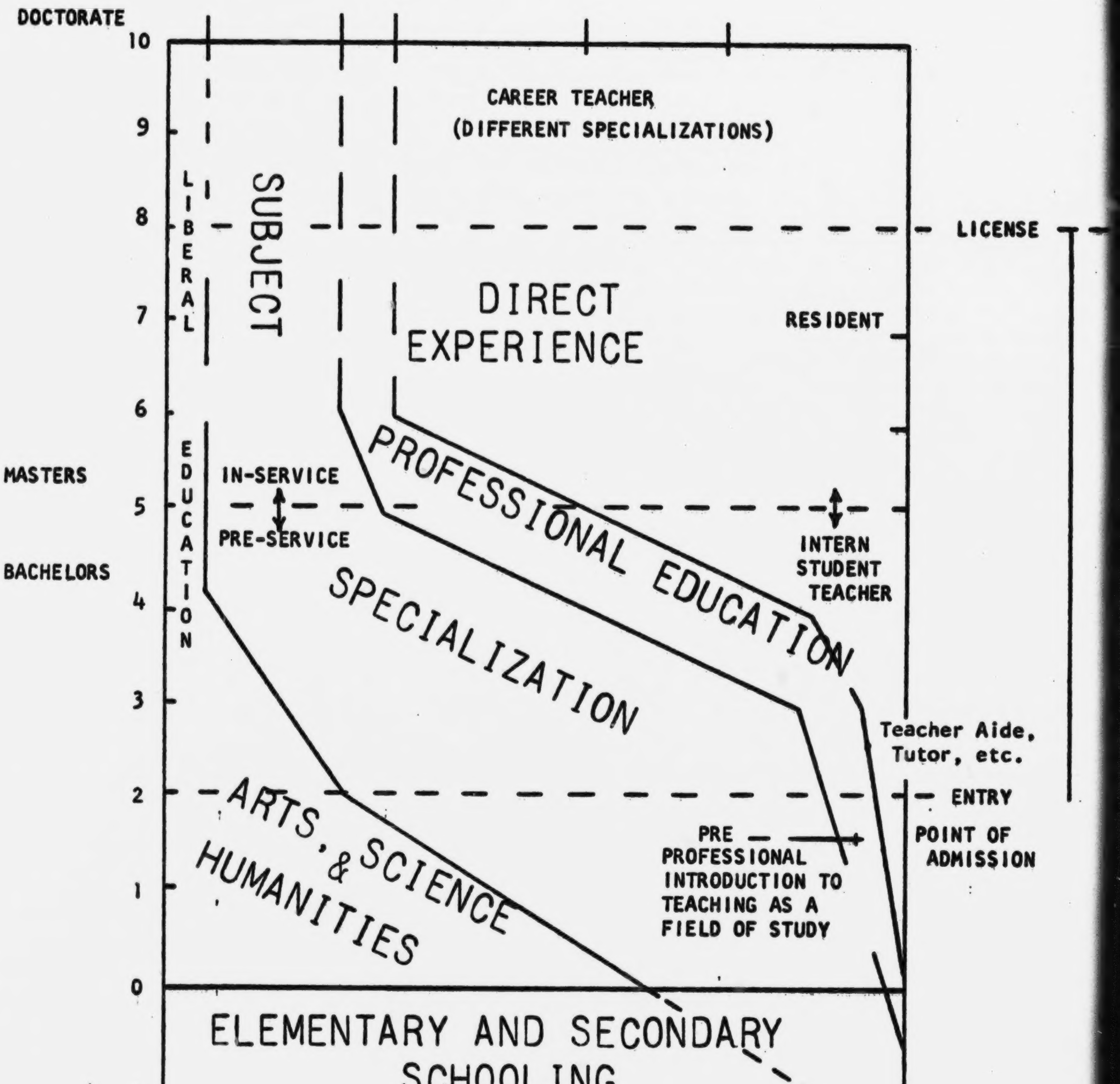
2. A five, six, seven, or eight year program culminating in a license and either a masters or doctoral degree.

    a. Continuous direct experience from the time of entry into the program, gradually providing in-depth experiences in the classroom role, curriculum decision-making staff role, and professional teacher-citizen role;

    b. Preservice education experiences which merge with inservice education and a continuing emphasis on the study of teaching as a life-long process; and

    c. Liberal education and studies in a special field to keep up with new knowledge and ways of knowing as part of continuing education.

INSTRUCTIONAL ORGANIZATION FOR TEACHER EDUCATION


DOCTORATE
10
9
8
7
6
MASTERS
5
BACHELORS
4
3
2
1
0
CAREER TEACHER
(DIFFERENT SPECIALIZATIONS)
LIBERAL EDUCATION
SUBJECT
DIRECT EXPERIENCE
LICENSE
RESIDENT
IN-SERVICE
PRE-SERVICE
PROFESSIONAL EDUCATION
INTERN
STUDENT
TEACHER
SPECIALIZATION
Teacher Aide,
Tutor, etc.
ENTRY
ARTS, SCIENCE & HUMANITIES
PRE PROFESSIONAL INTRODUCTION TO TEACHING AS A FIELD OF STUDY
POINT OF ADMISSION
ELEMENTARY AND SECONDARY SCHOOLING

(An adaptation of Robert N. Bush's organizational plan which appeared in a working paper.)

Figure 4

3. This organization is designed for the teacher of any subject, at any level, because it provides a different experience for each person who progresses through it. It is not intended that the teacher of a three-year-old have the same experience as the teacher of a thirteen-year-old, or for that matter that any two people in preparation have the same experience. Opportunity is provided to move in and out of the program as one works to prepare himself for a career as a teaching specialist.

4. High standards are maintained throughout by a commitment to the improvement of learning for the students to be taught by prospective teacher-scholars. Demonstration of competence is provided for and examined at all phases of the program.

5. The major resources in the program are a team of specialists in the educational professions, a differentiated staff with a variety of talents who can utilize both technological and human resources to personalize learning.

6. The study of teaching and the conceptual tools necessary for the refinement of such studies are learned through constant interaction of theoretical and practical considerations and an emphasis on inquiry and its application in schools and colleges.

What I have proposed here is not an easier way, or a harder way, or a deeper way, or a shallower way of doing the same thing. It is a different way. It is a way that calls for recognition of the importance of the personal dimension in the education of American children and youth and their teachers.

I am aware that wide scale implementation of the approach I suggest would involve revolutionary changes in educational institutions at all levels. That is exactly what the future demands.

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STATE OF WASHINGTON: THE NEW PLAN IN TEACHER EDUCATION

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Department of Education
State of Washington

Before launching into substantive material I do want to give you some background about the work which is going on in the State of Washington. About two and a half years ago the State Board of Education of the State of Washington suggested to Dr. Wendell Allen, assistant superintendent for teacher education and certification, that it was time for the state to study the nature of teacher education--all facets of it from top to bottom. As many of you here will remember, I happened to be on the staff here at Peabody College at that time. A few days following the meeting of the state board, Dr. Allen called me, relayed the intention of the state board, and invited me to join with him in the state department in looking into teacher education for the future. This is how I became involved with activities in Washington, and this is why I am here to talk to you about what has gone on since that time.

The first thing we did after moving to Washington State was to meet with a number of advisory committees which had been set up already; these committees were advisory to both the state superintendent of public instruction and the state board. We asked these advisory committees this question: What will teaching be like in 1985? (You will note that we did try to avoid 1984.) We spent a good deal of time talking to this general question, gradually focusing on where we were in 1966 and where we hoped American education was going during the 1970's. As a result of our conversations we came up with a list of ideas, ideas which now seem almost identical to those enumerated by Dean Corrigan last night:

- Staff utilization is changing.
- The role of the school is expanding.
- New curriculum developments are being introduced.
- Education is now more important to economic growth.
- Systems technology provides new program possibilities.
- Professional associations are more concerned and active.
- College students are rebelling against irrelevance.
- Our society needs teachers who are more involved and more humane with their students.

Gradually, as a result of our conversations, ideas began to be generated. These ideas were gradually expanded and became the _First Draft_ of a monograph called "Proposed Standards for the Preparation of School Professional Personnel Leading to Certification." (Just as an aside, you might be interested to know that we put a green cover on the _First Draft_.) The _First Draft_ was sent to approximately 75 people in our state, mostly members of the various advisory committees. We asked them to review it, to make suggestions, and to return the copies of the document for revision. The reactions from our committee members were not particularly supportive or gracious. So we wrote a second document and mailed it to an even larger group across the state, requesting feedback. (As I recall the Second Draft had a yellow cover.) This Second Draft was distributed to the academic and professional faculties of the teacher education institutions in the state as well as to our advisory committees. A discussion of this draft was the main item on the agenda at our annual May Conference on Teacher Education to which each of our institutions sends from ten to twenty delegates. I usually summarize that particular May Conference using a three-point format: (1) "It won't work." (2) "You can't trust those other guys." (3) "You have an interesting idea there."

During the summer of 1967, based upon the suggestions we had received, a Third Draft was written. (So that you will appreciate our creative approach, you should know that we put a blue cover on this one.) The Third Draft was mailed to every school in the state, to school board members, to legislators, etc. The design of the document included space for people to write their reactions. Formal requests were made of local and state professional organizations and agencies to study the Third Draft and to submit their reactions directly to the state office. We received literally hundreds of letters and notes from across the state.

From the Third Draft reactions as you might guess by now, we wrote a fourth one. The Fourth Draft was published in April of this year and I think I can say without stretching the truth that this document has been generally accepted by almost every institution and professional group that has studied it seriously. (So that you won't continue to wonder about the color of the Fourth Draft I should talk about it for a moment. By the time the Fourth Draft had been written, we had had a number of suggestions about the color for the cover. The most popular suggestion was brown. I hate to disappoint you, but the color of the Fourth Draft is really a dirty gray. The document had to be duplicated by the state printer and we left the color selection up to him.) The Fourth Draft was printed in quantity and distributed so that every person holding a professional job requiring a certificate was sent a copy.

There are four ideas which have persisted through all of the drafts. We think these ideas are fundamental and should serve as a rationale for program development for the future. Here are the ideas: (1) Professional preparation should continue throughout the career of the practitioner. Teacher education is not something that starts when a person takes his first course in education nor ends when he finishes college. It extends throughout the life of the professional worker. (2) If preparation is to extend throughout the total career of the practitioner, professional associations and school organizations as well as colleges and universities have to be recognized as teacher education agencies. (3) If preparation is to be a responsibility of these three different kinds of agencies, a new language for teacher education will have to be created--a language that is far more relevant and communicative than the one we presently use, i.e., course titles and college credits. Although we do not know what the language will look like we do know it needs to deal with the nature of performance, performance related to the stated objectives of the practitioner.

(4) Preparation and career development should be individualized, that is, it should value and capitalize on the uniqueness of the individual.

These four ideas, simple as they are, have persisted through each of the four drafts. During these past 2 1/2 years we have been trying to find a way of organizing teacher education so that these four ideas can be realized. If I may, I would like to spend the bulk of my time with you this morning going over, step by step, the thinking processes we have gone through in developing a new scheme for preparation. You should know that we came to the same conclusions Dr. Corrigan discussed last night. We became convinced that there would be basic changes in staff utilization in the public schools in the very near future. We became convinced that there would be new professional roles in our schools, that the present roles would be redefined and differentiated. The first step, then, in our thinking, was to suggest that the people who were to prepare personnel for the common schools needed to define the nature of the roles for which personnel were to be prepared. We did not suggest that there should be uniform role definitions across the state. We did suggest, however, that colleges, school organizations, and professional associations collaborating on programs, had to come to some agreement about the nature of the role about which they were concerned. The first step, then, we said, was role definition.

The second step based upon this role definition was to specify the performance objectives required to play the defined role. Statements needed to be made which clearly indicated what the trainers wanted the trainees to be able to do, what they could see them do, or what the trainees could see themselves do. At the same time that performance objectives were being defined we indicated that criteria and levels of performance had to be established. We declared that criterion levels for performance probably would be arbitrary at first but that research would revise these criterion levels in the future so that expectations could be defined in relationship to professional career benchmarks.

The third step in program planning, according to our thinking processes, was the establishment of performance tasks, that is, tasks for the candidate to do which were appropriate to the kinds of performance objectives which had been specified in relation to the role definition. (This step is a little complicated so you may wish to refer to the diagram 1, page 26.) The establishment of tasks is complex, because tasks are always related to circumstances. The materials, the facilities, the resources, the emotional climate, always influence the basic nature of the tasks. The establishment of tasks must take these variables into account.

In looking at the diagram I notice that I have neglected to say that at the same time performance objectives are being established, models need to be available, either live or on film, showing people performing as defined. You will note on the diagram we have recommended that models illustrate variations in style or personality as they perform or achieve the specific performance objectives. We also have suggested that the same models ought to perform at different levels of competence. People being what they are, they are not only different one from another, but the same person is different at different times. A person on a Monday morning may perform quite differently than on a Wednesday morning. An individualized program does

PLANNING PREPARATION EXPERIENCES SYSTEMATICALLY*

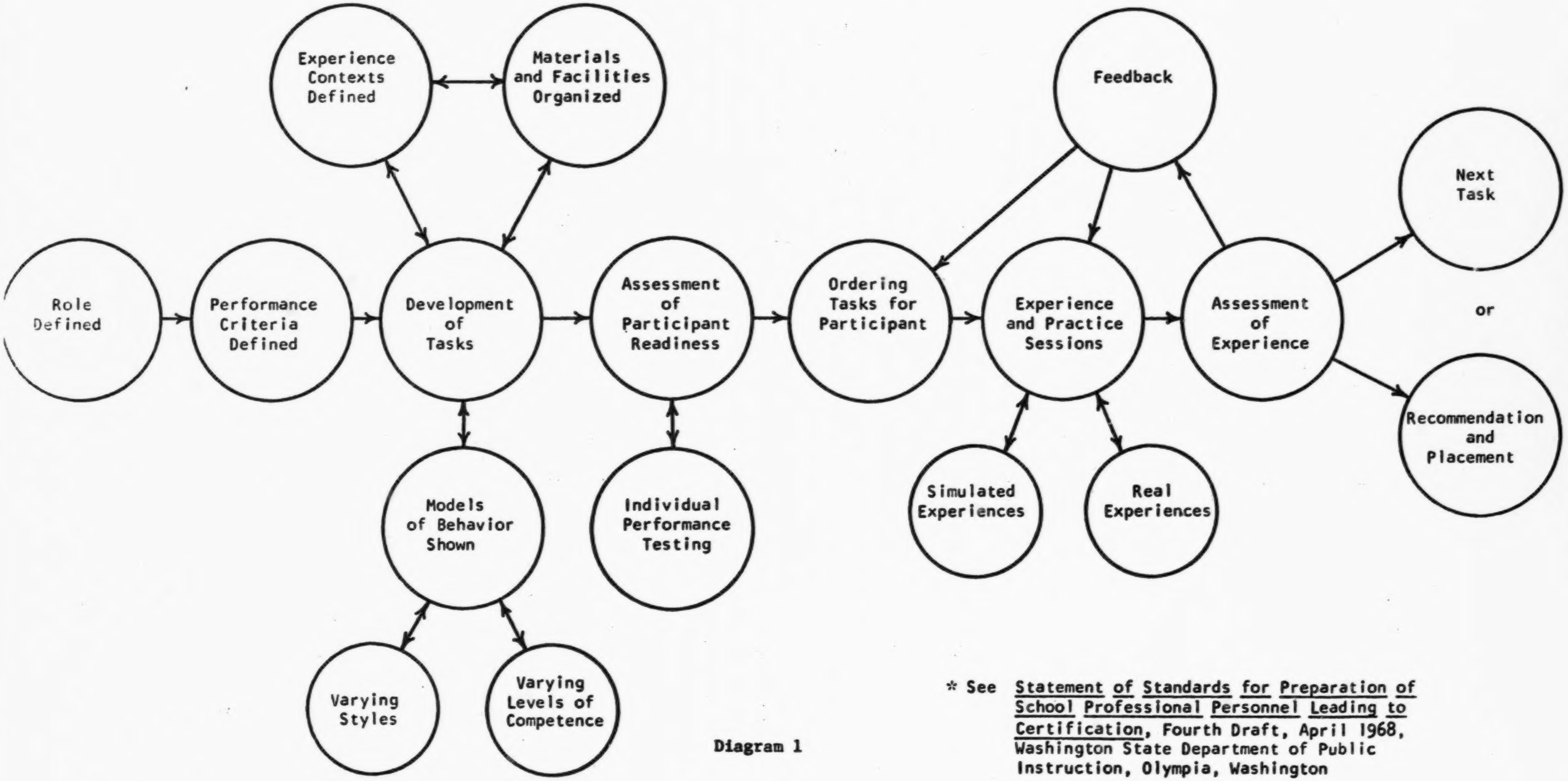

Experience Contexts Defined
Materials and Facilities Organized
Feedback
Next Task
Role Defined
Performance Criteria Defined
Development of Tasks
Assessment of Participant Readiness
Ordering Tasks for Participant
Experience and Practice Sessions
Assessment of Experience
or
Recommendation and Placement
Models of Behavior Shown
Individual Performance Testing
Simulated Experiences
Real Experiences
Varying Styles
Varying Levels of Competence

Diagram 1

* See Statement of Standards for Preparation of School Professional Personnel Leading to Certification, Fourth Draft, April 1968, Washington State Department of Public Instruction, Olympia, Washington

indeed require an opportunity for people to be different, and this concern makes teacher education very complex.

Referring to the diagram again, now that professional roles have been defined, performance objectives clearly stated, and performance tasks established, based upon the performance objectives, we now can deal with the idiosyncrasies of a particular person who will undergo the program.

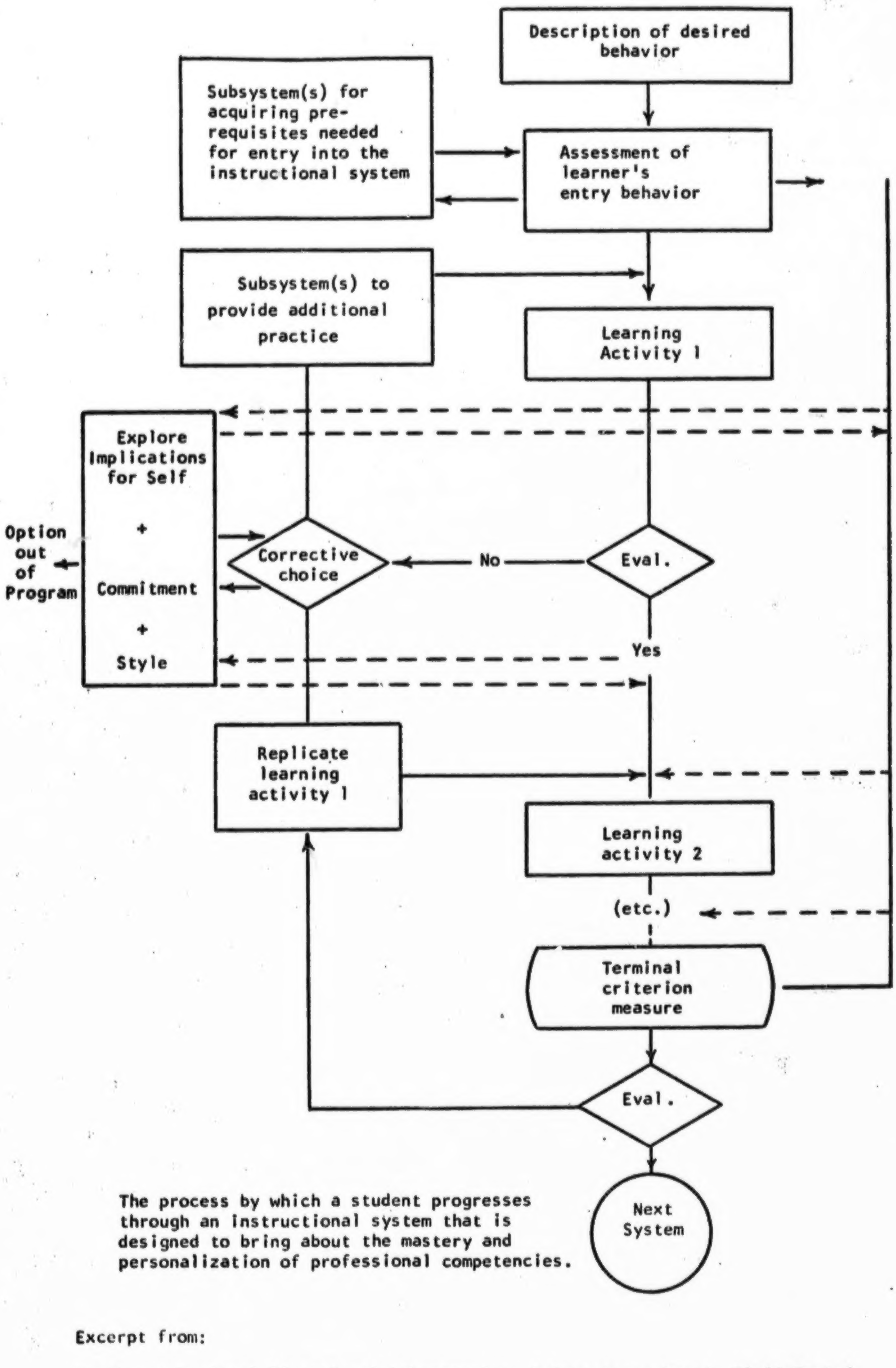
The next step, then, we said was to make an assessment of the student in terms of his readiness and willingness to undertake the tasks established. The assessment, of course, should be based upon the performance criteria which have been established. No doubt better performance readiness measures will have to be developed so that we can have a better basis for selecting initial tasks for the individual.

Once assessment of readiness has been completed, the ordering and scheduling of tasks in relation to the individual person can be undertaken. Let me illustrate: Jimmy Jones has indicated that he wishes to be a teacher and has gone through the preliminary screening necessary for involvement in the program. Jimmy has been shown a list of the performance tasks which have been established for the general program he has selected, and he has been asked which of the tasks he would like to work on first. Based upon the task he selects, he then is given a series of experiences in a situation in which his responses can be recorded and fed back to him, depending upon an assessment of his responses both by his professional advisor and himself. He is then in a position to order his next performance task based upon his own assessment of his previous performance. A schedule may be created for him and by him to go through the various experiences which have been established which will elicit the desired performance behavior.

Once a schedule has been created for Jimmy Jones, he then undergoes a set of experiences which are either simulated or real. Immediately following each experience there is an assessment made of his performance to see if it has been consistent with his own aspirations and the minimum aspirations of the training agencies. Each assessment provides Jimmy Jones the opportunity to repeat the experience, go on to another experience, or attempt to develop, with assistance from others, other unique experiences not already in the repertoire of the training agencies.

The key to the success of the preparation program lies in the quality and effectiveness of the feedback mechanisms. If Jimmy Jones is to improve himself, he must see himself as others see him and reconcile his performance with the models he had been shown and his own aspirations for himself. Once he is satisfied with the kind of feedback he is receiving with respect to a specific performance objective, he may request that his behavior be monitored by others who have the responsibility for recording and reporting his success with respect to the particular task assigned. He then is ready to go on with the next task. (Please note the diagram 2, page 28 from the ComField Proposal of the NWREL.) This completes a general outline of the way we have been thinking about teacher education programs.

As you probably know, I have just outlined for your an instructional system based upon well known systems technology. We in Washington State think that systems technology provides us with the tool we need for planning a preparation program which is individualized.


Description of desired behavior
Subsystem(s) for acquiring pre-requisites needed for entry into the instructional system
Assessment of learner's entry behavior
Subsystem(s) to provide additional practice
Learning Activity 1
Explore Implications for Self
+
Commitment
+
Style
Option out of Program
Corrective choice
No
Eval.
Yes
Replicate learning activity 1
Learning activity 2
(etc.)
Terminal criterion measure
Eval.
Next System

The process by which a student progresses through an instructional system that is designed to bring about the mastery and personalization of professional competencies.

Excerpt from:

Northwest Regional Educational Laboratories, A Competency-Based, Field-Tested, Systems Approach to Elementary Teacher Preparation. (ComField)
U. S. Department of Health, Education and Welfare, Office of Education, Bureau of Research, Final Report Project No. 89022, p 13.

Diagram 2

If you look at our present patterns of teacher education (at least in the institutions in which I have worked) the objectives of the instructional program are hardly ever clear, and they are not stated in behavioral terms. Most programs do not provide adequate models. Professors tend to say, "teach this way, but not the way I teach." Usually the only model a student going through a program has is his supervising teacher during student teaching. We know that sometimes this supervising teacher performs in a manner which is inconsistent with the values she espouses. Perhaps most important, institutions have not worked to develop adequate feedback loops regarding teaching performance. Just talk to a student teacher and find out what he is concerned about. He complains that he isn't being told enough about how he is doing. You will hear statements like this, "My master teacher tells me I am doing just fine. When I ask 'How can I improve?' the response I get is 'I don't know. It seems to me you are doing it just fine.' I want to know more about how I can improve."

Let me get back to my review of what we are doing in the State of Washington. We are, as I have suggested, trying to establish a new pattern for teacher preparation and certification. We are trying to do this by suggesting a new form of teacher certification based upon a systematic analysis of what teachers do. First, as I indicated earlier, we have suggested that three kinds of agencies need to be involved in teacher education development---colleges, school organizations, and professional associations. We have said that the establishment of new programs have to be done through collaborative agreements among these three agencies. The college can't do the job by itself. The school organization can't do the job by itself. The professional association can't do it by itself. There have to be agreements. Secondly, we have suggested that there is a planning sequence for program development, a sequence very similar to the steps I have talked about here. We have suggested to our teacher education people that they begin planning by looking at the role of the person who is a full-fledged practitioner. You may be interested in the fact that our unions have insisted on this. They have indicated that there needs to be a time designated when a teacher is clearly recognized as a teacher. There needs to be a time when the person is recognized as "in" so that he can receive all the rights and privileges attendant to the status of teacher.

We have suggested that a certificate be issued when a person meets these criterion levels of performance and that the state issue a "Continuing Certificate" at that time. Program planning then should proceed in a backward direction from the awarding of the Continuing Certificate. The certificate which would precede the Continuing Certificate and which would allow the person in training to work in the public schools and to have some independent responsibility for clients, has been designated the "Initial Certificate." Most people call this period of preparation an internship. The new certificate program suggests that before the person is able to participate as an intern, he should be encouraged to participate in public schools in a variety of ways. Such a person should be legally recognized so we have suggested a certificate preceding the Initial Certificate which we call the "Preparatory Certificate." This makes the person involved in laboratory experiences a legal agent of the school and provides a possible way of funding professional laboratory experiences by the state.

Let me review. We have suggested that teacher education planning be engaged in by three different agencies, schools, colleges, professional associations, that this planning proceed from a definition of full career status backwards. There will be three certificates in the normal course of events: a "Preparatory Certificate" issued when a person begins engaging in real laboratory experiences, an "Initial Certificate" issued when a person is ready to assume some independent responsibility for clients, and a "Continuing Certificate" issued when a person has achieved the performance objectives at criterion levels outlined for career status.

A fourth certificate has been proposed above and beyond the three already mentioned--a "Consultant Certificate" for those persons who are able and are engaged in teacher education. Persons desiring Consultant Certificates would become involved in training programs and would have to demonstrate that they had achieved performance objectives for conducting teacher education work. The Consultant Certificate would provide a means for the master teacher to remain in teaching and receive appropriate recognition for professional contributions.

The proposed certification plan for Washington State, then, has four levels of certification: preparatory, initial, continuing, and consultant.

The plan also calls for the classification of all professional roles into three types for certification purposes: teachers, administrators, and educational staff associates. The term "educational staff associate" is a newly coined term to designate special staff personnel who assist the instructional or administrative processes, such as counselors, school psychologists, school social workers, instructional media specialists, reading diagnosticians, etc. In each case the person completing an approved program would receive an "Educational Staff Associate Certificate" at the continuing level, the certificate having an endorsement for the particular specialty toward which the training was directed. Thus, you see, the Washington plan calls for three types of certificates and four levels of certification.

You may wish to know how we became convinced that an individualized systems approach to teacher education was the way to go. The idea grew out of an M-STEP(Multi-State Teacher Education Project) activity between Washington State University located in Pullman, Washington, and the Bellevue Public Schools, a suburban district of Seattle, some 300 miles away. The WSU-Bellevue project was directed by Dr. F. Herbert Hite, now chairman of the Department of Education at Western Washington State College, Bellingham. The overall purpose of the project was to articulate preservice teacher education with inservice staff development activities and school district expectations.

It was conceived in the formative stages of M-STEP that if students early in their college work could be identified and pre-hired by a school system, professional preparation could be tailored to meet the needs of the school system and the college student. After all, the student would know generally where and what subjects he would be teaching, and the college would know what curriculum materials and facilities the student would be working with.

To get such a program started had its difficulties. People had to meet who were 300 miles apart. M-STEP funds were used, therefore, to transport people back and forth between the agencies. As a committee of WSU faculty members met regularly with Bellevue staff, gradually a description of school district expected performance competencies began to take shape. Personnel officials in the Bellevue Schools balked at the idea of interviewing college juniors for employment when they (the students) had not taken their professional course work. Students, likewise, were not overly eager to commit themselves to teach in a school district that far in advance. Gradually, and with a great deal of forbearance on the part of many people, students were selected and program planning began.

A statement of competencies expected by Bellevue (used by interviewers) was analyzed by Dr. Hite and his associates from a "systems" frame, and they restructured their list of competencies into twenty-five instructional tasks. These tasks became the objects for individualized programming. Each task was organized in a manner similar to the ComField diagram. Only six of the twenty-five tasks were organized when the twenty-eight selected students began the program. Three alternative learning sequences were designed for each task by the university faculty; they assumed that three sets of experiences would be adequate. Interestingly enough, nearly all of the students chose to take all three of the alternative sets and then asked for more. Although the faculty advisors felt the students had reached criterion levels of performance for each task, students who had a chance to give one another feedback on their efforts were not satisfied. Students, in other words, when given a chance, applied higher standards to themselves than the faculty would have applied to them.

It was really interesting to watch those twenty-eight college students deal with the instructional tasks and to see how their anxieties and problems influenced the program designers. For example, one student, after completing Task #1, asked if he could skip to Task #6, by-passing the intermediate tasks. The faculty committee had to meet about this unexpected option and it was decided that individualization required that the student be allowed to make this choice. After completing Task #6 on his own, the student went back to Task #1 and started over again. You should know that by the time the last person had finished Task #1, the twenty-eight students were spread over six or more tasks during the remainder of the semester. Each student had his own pace for learning, but he always worked with those other students who were working on the same task. Working together was something that had to be learned, too.

Soon after the students had been selected, they were asked to take a number of personality tests as part of a pre-testing program. To the surprise of everyone the group was very diverse; on every personality measure some person in the group scored in each decile according to national norms. When this diversity was realized, the staff wondered how the program should deal with these apparent differences. The University Guidance Center was contacted. A group guidance expert suggested the establishment of sensitivity groups--three groups of nine or ten persons each--which would meet weekly with a trained person at the guidance center. These sensitivity groups continued through the entire semester. For some students group sessions were the most important activity of the year; for others the sensitivity sessions were a waste of time. After three or four meetings those who disliked the sessions dropped out. Many of the anxieties and feelings associated with performing "out in the open" were overcome by the students when they began to realize that their own feelings were common feelings, and they could be shared with others.

Perhaps the most difficult obstacle to overcome in the WSU-Bellevue Project, from the faculty point of view, was to find appropriate materials to use in the teaching of a specific performance behavior. Most of the stuff available in teacher education is global in nature: it deals with a total lesson, a total class, and the use of a variety of techniques all at once. There are some materials now available which are specific: the VimCet series, some of the microteaching materials from Stanford and from the Far West Educational Laboratory. But if you want to show how to do a specific instructional task from what is now available, you are in trouble; the search seems endless. The development of specific materials is a real need right now.

The WSU-Bellevue Project is continuing. The students are now first-year teachers in Bellevue and continuing to use and improve their performances re the twenty-five instructional tasks. You should see and talk to these people. They not only do an excellent job of teaching, they know why they do what they do. I have never talked to first-year teachers who were so well grounded in learning theory and who were so open about their own efforts. This small project has given many of us in Washington assurance that what we are about in the Fourth Draft will work and has power.

Although I don't mean to be melodramatic, I am convinced that our basic democratic values will go by the board unless we can individualize instruction in the schools, unless we can really care for children as individual human beings. If wholesome human relations are not practiced in school, I don't know where they can be practiced. I guess I support Herb Thelen's idea that the school should model the good society. Kids should learn somewhere what it feels like to live in a good world. The school can care for each person and value his idiosyncrasies. It can help each person be successful every day. (I regret to say that the way schools are now operating they do not help most persons feel personal success.) If we are to create schools which are democratic and supportive of human beings, we need to prepare teachers that way. Teachers need to experience what an individualized and humane program feels like. When one is willing to make decisions and is able to accept the consequences, when one cares about the other person and he cares for him, then, man, he's free. Freedom allows untapped personal energy to be used and generated. It really turns people on. That's what schools should do. That's what teacher education is all about.

Appendix A

THE CAREER TEACHER PROJECT AT WASHINGTON STATE UNIVERSITY AND THE BELLEVUE PUBLIC SCHOOLS

Washington State University and Bellevue Public Schools are collaborating in a teacher education experiment to demonstrate the following propositions:

1. Standards for teacher education should be descriptions of performances by the effective teacher.
2. The University's program of teacher education should consist of ways and means for helping as many candidates as possible demonstrate effective teaching performances.
3. The cooperating school district should provide opportunities for the beginning teacher to continue the practice and study of these specific teaching behaviors.

During 1966-67 a committee from Bellevue and Washington State University developed a list of the characteristics of what they conceived to be an effective teacher. The WSU Department of Education staff then stated these characteristics in terms of behavior. These descriptions of what the effective teacher does in the classroom became the "standards" for the Bellevue-WSU demonstration. There follows a list of 25 tasks for teacher candidates at WSU. These tasks are the new standards, and the behavioral objectives of the program, inasmuch as they describe the effective teacher in the classroom.

The demonstration is limited to the technology of teaching. Other important characteristics of effective teaching which are not part of this particular demonstration are abilities to use a knowledge of the foundations of education, and skills in working with members of the community and profession.

A. Determine Objectives

Task 1. Define "behavioral objective," and list characteristics of behavioral objectives.

Task 2. Distinguish between objectives which are behaviorally stated and those not so stated.

Task 3. Write behavioral objectives for learning activities appropriate to trainee's special field of teaching.

Task 4. Write objectives for own field for cognitive domain of behavior: (a) for knowledge level of behavior, and (b) for higher levels of behavior.

Task 5. Write objectives for own field for effective domain.

Task 6. Write objectives for own field for psychomotor domain.

Task 7. From Bellevue curriculum guides and other sources, trainees select examples of objectives which illustrate, (a) convergent thinking, (b) divergent thinking, (c) evaluative thinking.

Task 8. Trainees state how the objectives they have written for preceding tasks are appropriate to (a) societal needs, (b) developmental needs of the youth he will be teaching, (c) structure and methods of inquiry of the discipline from which the objectives are drawn.

B. Modify objectives to meet individual differences

Task 9. State prerequisites for given objectives.

Task 10. Write descriptions of procedures for assessing the degree to which different types of learners are likely to possess the necessary prerequisites for a learning task (including, interpret individual Bellevue student scores and profiles obtained from batteries of standardized tests).

Task 11. Write modified objectives for different types of learners.

C. Select media which implement appropriate practice of the desired pupil behavior.

Task 12. Choose from among available media, and justify choices in terms of (a) relevance of content, and (b) appropriateness of media's characteristics to the desired behavior.

Task 13. Select media appropriate to different learners' characteristics.

Task 14. List sources of media available for trainee's special fields.

Task 15. Construct examples of types of media useful in special field.

D. Organize the learning environment.

Task 16. Write plans which place in appropriate sequence (a) anticipated pupil activity, (b) teacher actions, (c) media. Allot necessary time for aspects of the plans.

Task 17. In simulated classrooms, place equipment, media and pupils to facilitate different types of activity.

E. Interact with students.

In each of these five types of situations, interact with pupils effectively by (a) eliciting frequent pupil responses, and (b) reinforcing appropriate responses:

Task 18. Describe to pupils a specific learning task, and elicit responses which indicate a favorable "set" toward the task.

Task 19. Elicit responses which indicate practice in acquiring knowledge.

Task 20. Elicit responses characterizing convergent thinking; or behavior at the comprehension or application levels of the cognitive domain.

Task 21. Elicit responses which characterize divergent thinking, or the analysis or synthesis levels of the cognitive domain.

Task 22. Elicit responses indicating evaluative thinking.

F. Evaluate student progress.

Task 23. Write test items which adequately sample behavior described in previously written objectives.

Task 24. Appraise student performance according to criteria based upon objectives.

Task 25. Confer with pupils individually so as to elicit pupil responses indicating a fair appraisal of the pupil's own performance.

In this demonstration of a new program for teacher education, the object of teaching is learning. Learning is conceived to be a desirable change of behavior. The practical objective of the teacher education project at Washington State University and Bellevue Schools is to have each of the subjects in the experiment demonstrate proficiency in each of the 25 tasks or standards.

The learning system which makes it possible for a subject to demonstrate proficiency consists of five elements:

1. A statement and explanation of the desired behavior.
2. A procedure for assessing each learner's entry level in relation to the desired behavior.
3. Alternative sequences of learning activities in which each learner either:

(a) successively completes behaviors which constitute essential steps leading to the objective

(b) demonstrates an advanced level of entry behavior, and consequently bypasses selected essential steps leading to the objectives, or

(c) demonstrates a deficiency and meets prerequisites to essential steps leading to the objectives.

4. A criterion task in which the learner demonstrates the behavioral objective in terms of a generalized performance standard.

5. A second criterion task in which the learner demonstrates the behavioral objective in terms of situation specific performance standard.

A flow chart illustrating the interaction of the description of behavioral objectives, alternative instructional systems, and alternative assessment systems appears as Figure 1, page 37.

SCHEMATIC DRAWING OF TRAINING SYSTEM

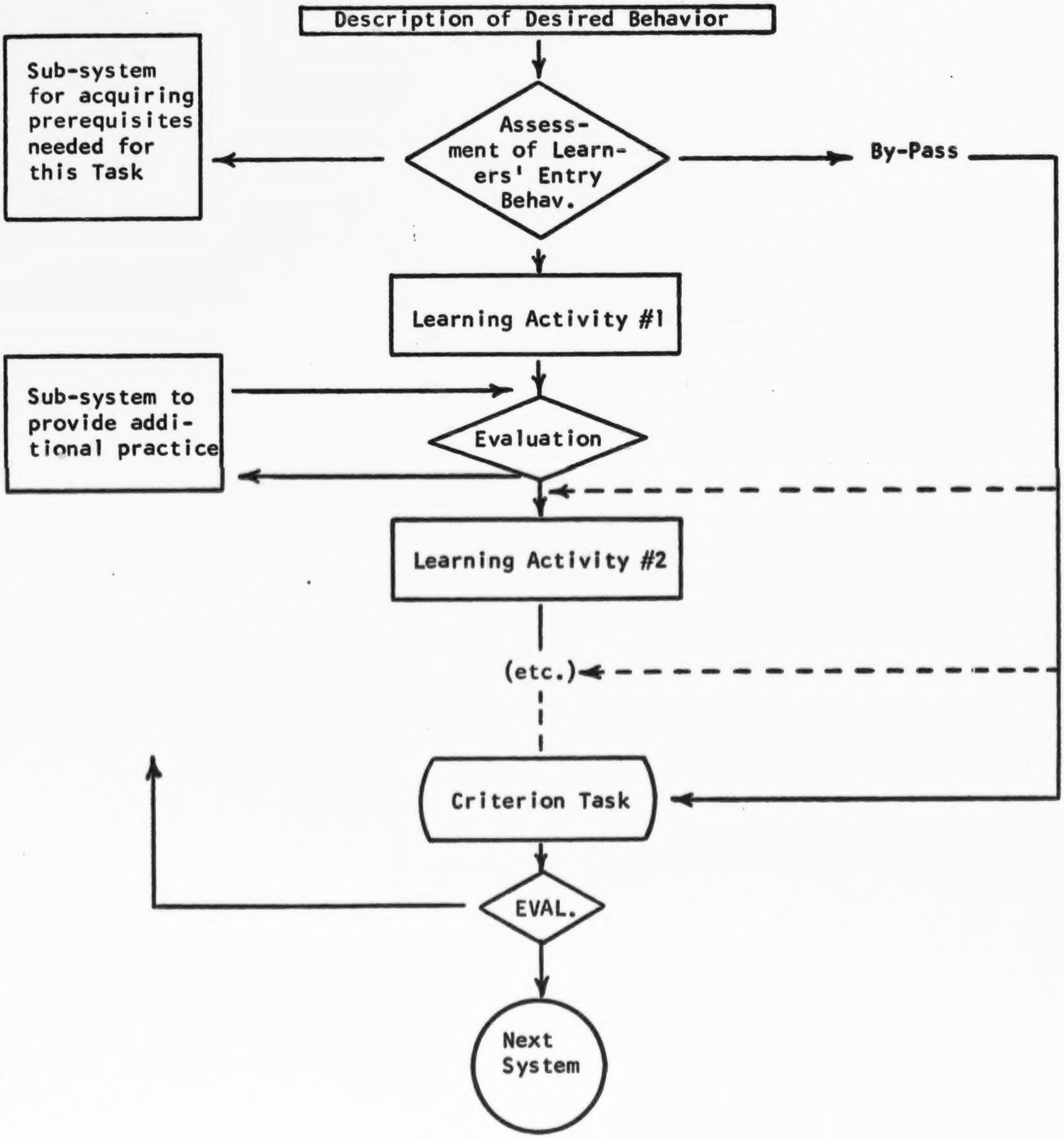

Description of Desired Behavior
Sub-system for acquiring prerequisites needed for this Task
Assessment of Learners' Entry Behav.
By-Pass
Learning Activity #1
Sub-system to provide additional practice
Evaluation
Learning Activity #2
(etc.)
Criterion Task
EVAL.
Next System

Figure 1

REACTOR PANEL TO DR. CORRIGAN AND DR. DRUMMOND

Sidney Simandle, Director
Division of Teacher Education and Certification
Department of Education
Kentucky

I think anyone of us here would covet the opportunity to speak on some of these topics for an hour or two ourselves. However, in this particular situation, I think we're more or less responsible for making a few comments and not even elaborate too much on them. I am very much delighted to have heard the two presentations that we have had so far, and I don't choose to take issue with either one of these or with any of the items that were mentioned. I would prefer to relate some of the things that we said to the overall problems of teacher supply and demand, so I will proceed with these comments.

First of all, I have about four comments. First, I think that statistical data about teaching personnel are important and useful and should be acquired in as much volume as is feasible. I think that it is good to know how many science teachers we have, how old they are, when they might retire, at what rate, how many of them are leaving the profession each year for this reason or that reason or the other. It is good to get this information. We have quite a bit of it, but we don't have quite enough. It's another thing to try to use this information in an attempt to assure an adequate supply of teachers in the future. One of the reports in your packet was done maybe two years ago, and as an example they mentioned this oversupply of men physical education teachers. We have experienced this in Kentucky for I guess ten years--an over-supply of men physical education teachers to the point where it might have been the right thing to do to advise the freshman, sophomores, juniors, and seniors in college, "Don't prepare for men's physical education; or if you do, prepare for another subject along with it as a safety device in case you can't find a job."

Now last year and this year, we are experiencing a severe shortage of men physical education teachers, and what happened? Well, suddenly the influx of federal funds made it possible to add programs in the elementary school and secondary schools that we'd never had before. Many of these had to do with health and physical education, and so what appeared to be a gross oversupply, now suddenly within a space of two or three years, is a shortage of commerce teachers--business education teachers. I don't mean people who had finished a bachelor's degree program in business or commerce; they couldn't find a person who had any college work at all and some typewriting to put on even in the most severe emergency bases. So we began reporting that year that there was a shortage of commerce teachers. Two years later there was an oversupply. It just so happened the shortage was that one year in about ten or fifteen positions, and by the time people started talking about it, it got up to about 150 to 200 positions--it wasn't so. As soon as these were filled, that was the end of it. And so it is very difficult to predict what might happen in the future with respect to the new positions that might be established through a revision of a state aid program, through a revision of federal provisions, through internal decisions within the school district. It is hard to predict where the shortage might be. Right now we might speculate on the fact that some time in the future--this year, next year, the year after--suddenly we might need hundreds and hundreds and maybe thousands of kindergarten teachers. But I doubt if we are advising our freshmen now to prepare as kindergarten teachers. So I think it is good to get information, but it is very dangerous to try to use the statistical information of what is today to advise our freshmen and sophomores about the future. This is even more apparent when we review the things that were presented about the various types of job specialization, the various types of instructional approaches that will involve teams of people working in a different way from what they are working now to the point where really the specialization for the teaching performance in the future will be developed and refined on the job in connection with the work at hand, in connection with the teaching profession, and in connection with the educational institutions rather than in the preservice preparation program. The person who prepares to teach a certain specialty at the high school level finds, for example, that he might have only the barest general introduction into this area and that it would have to be refined after he or she was on the job. We still have the fact that a person, say a woman teacher who miraculously might have majored in physics, settles in a rural community where the only job opening is at the elementary school level. She makes her career then teaching the fourth and fifth grade; we have to reckon with this when we look at the statistical data. So more and more, regardless of the initial preparation, we have to think of the forty-year span of teachers on the job. I would hope that people would continue to specialize to some extent in their initial preparation, but I think we shouldn't overemphasize this. Again someone said to me, "We ought to be studying research in how learning takes place." Maybe the best way we could equip a teacher for the future could be a broad general education and a good background in the foundations of education--how education takes place, how we work with youngsters in this context, and add our particular specialty, refine it once we are on the job.

Well, I will jump on to the last two points here. I hear Bill Drummond saying schools should become a model of society which again indicates to us, don't we need to know the model, don't we need to know the type of society we would like to produce? We have been saying that education must change in accordance with our dynamic society and now we are finding that education is perhaps the most vital force in shaping society. So to what ends would we like to see society shaped? Can we bring this model into being in our schools? But instead of this, we are being told by some people--anthropologists, sociologists, and even some among us as educators--that our schools may even now be destructive of certain human values and growth. This worries me. Here I am trying to dedicate my life to education as you have, and when someone tells me now that I am really doing more harm than good, I want to know more about this. I think it is a serious charge or indictment or consideration that we must hear what the sociologist, anthropologist, psychologist, and other people are saying, and so far many of us in education have divorced ourselves from these very disciplines now that are important to knowing how to shape our schools for the future. We discourage our teachers from specializing in sociology because they can't teach it in high schools, so specialize in something that you can teach. We discourage them from taking philosophy and getting in-depth studies of anthropology because we crowd these out in our curriculum. There is something else more important. And so in a sense we have shut ourselves off from the grass-roots of the very disciplines we need now to cope with our present needs. I think this has professional implications. I think it has civic, patriotic implications. I even think it has moral implications if we are trying to do one thing, and we are being destructive.

Now I do represent teacher education and certification in our state, and in closing I would like to state that as we move toward the future, let's consider certification as one of the vehicles by which movement and development and progress can take place. We see certification as the vehicle by which we implement certain professional decisions--not as a barrier for making new professional decisions. But once we decide what we would like to do and set a course of action, then certification becomes one of the governing devices to keep us on that course. So let's think of it as a vehicle as Bill Drummond pointed out, a device for recruitment, a device for recognizing certain stages of professional development, and as a device for encouraging future development. Once we can develop consensus on how we would like to go, it is very simple then to translate that into a certification plan that will be a vehicle for progress rather than as some barrier or some roadblock or red tape to keep us from doing what we would like to do. Thank you.

Donald G. Sahli, Executive Secretary
Tennessee Education Association

I hope that I can react without being reactionary. It does seem to me that perhaps we have moved the focus from supply and demand of educational personnel in 1968 to the type of personnel we hope will be in demand in 1985. I think this is not bad. Rather, I think this is good, because I agree that this has to be much more than a numbers game. It does concern me that in this conference and in similar conferences we seem to have a lot of very fine ideas, but somehow we are not coming through with the research, with the pilot programs, or maybe we are not communicating them adequately in order to back up a given idea.

I think Bill helped some at this point by giving us the Bellevue situation. I think we need a great deal more of that sort of thing to prevent us from simply going so many routes, simply innovating sometimes as a counterpart of the traditional, without being sure that the change is progress. I think if we are going to involve the rank and file of the profession, if we are going to involve the public as we must, then we do have to back up our ideas with some pretty saleable research information.

Also I am concerned that since every aspect of the profession must be involved in anything as important, and I think desirable, as the differential staffing, it seems to me that we need to somehow lay out some means of attempting to get a consensus as to the proposal mentioned here. It seems to me that this is not only very necessary, but also very difficult, and I don't see that we are working toward a consensus. We represent different groups. Higher education, of course, has to provide a great deal of the leadership here. Yet higher education can't really be basically responsible for certification changes which have to be generally approved. The educational associations have to be involved, and yet the educational association, after all, represents the working force of the present day. Its actions are determined, therefore, by the attitudes of those currently serving as practitioners. Certainly the classroom teachers are demanding a much greater voice in such decisions, and yet classroom teachers so often are not involved in the type of thing which we are doing here in this conference. The classroom teacher just isn't being prepared, I think, to provide leadership sufficiently. The state department of education perhaps is in an ideal role here, because they do have regulatory powers and have a big impact on education and educational changes. But as Bill has indicated, they can issue statements, and the feedback can be quite negative if they go it alone. It seems to me here again that Bill was very helpful and very practical when he said that this needs to be a cooperative effort of the colleges, the state professional organizations, and the school organization.

But I think that if we are going to be realistic about this, we have to go a little beyond that and try to determine the best means of communication--to determine some practical machinery to develop this agreement among groups. As to this point, it seems to me that even the experts don't have a consensus. Particularly in the discussion groups last evening following the general session, we found that there was quite a wide range of opinion yet even among the leadership. Until leadership arrives at some consensus, and until we work out a procedure for getting a broader consensus, we are going to, it seems to me, move too slowly. Certainly one thing becomes obvious--to move in these directions the certification requirements must be more flexible. As they stand, certification requirements can be a deterrent rather than an asset. Yet we think of certification requirements as being means of elevating these standards.

How can we permit less rigid requirements but with some confidence that standards will be maintained? Well, certainly the answer there has to be a larger degree of confidence in the institutions which are preparing these people, the personnel, for the educational program to come through with better qualified individuals without those qualifications being tied down rigidly. I might get some argument on this point, but it seems to me that the very question of supply and demand of personnel is very pertinent within higher education, too, and in teacher education institutions. There are those who think there is a weakening at this point right at the very time that this ought to be the bulwark where we strengthen the quality of the personnel in the program as a whole.

In Tennessee at the moment we are attempting to expand considerably in two areas. One is in the counseling service, and the other is at the kindergarten level--trying to make each a part of the minimum program. In each case, we are faced with a tremendous shortage for, since the demand in the past was not great, young people did not prepare for these positions. Now that we are attempting to create the positions, we don't have the qualified people to fill them, and so it seems to me that in looking at this problem there is the necessity for always projecting out ahead, and this isn't easy. Then there is the question of counseling, and again many here would know the answer to this while I do not, but going back to my own experiences in higher education as a student and faculty member, I am sure we were not counseling enough students as to the fields into which they could go and which they were most qualified to fill. Rather, they were simply more or less drifting according to their own inclination. I think we are at a point, perhaps at the college level, where there needs to be more assistance given to people by way of very specific counseling. That is all that I will inject at this time.

George Denemark
Dean of Education
University of Kentucky

I would like to begin by departing from the concepts associated with the Washington State Plan which focuses on different levels of competence more than in performance for teachers. It seems to me that this, on one hand, is a startling idea; but it is, I think, an idea of central importance and urgency to schools at this time.

In terms of teacher education, for example, if it were possible for us to get away from the notion somehow or other, the frustration of feeling that the market out there is looking for people who are polished, finished performers who can move in kind of an instant success kind of situation and operate in an independent autonomous role of directing learning--if we'd get away from that, it seems that we'd do a much better job. And this proposal, I think, which starts by assuming that you are engaged in a preservice university based program, is simply establishing the foundations or the beginning points of operation in the classroom, and it assumes also, it seems to me, that you are doing this in some relationship to other, more experienced, more qualified personnel rather than being cut adrift and isolated in a single classroom. You are working very likely with a team of individuals with a range of experiences. And this I think can make a great deal of difference to us.

When colleges of education are caught in the business of being pressured to fill in all the details of the outline rather than to build a foundation, I think they get caught up in emphasis on the wrong thing. It seems to me they end up more concerned about immediate short-term proficiency in looking good at some of the things that are visible right next week, or next month, than they do in helping to build a framework within in which a person can profit from subsequent experience. I think some studies done recently tend to confirm this.

One would assume logically that experience on the job would be likely to enhance and expand the person's repertoire of skills in teaching; that he be a more flexible, many-faceted person after three years on the job than he was when he went out. But some studies recently have suggested that it doesn't work that way. Looking at young teachers after several years on the job suggests that they have moved already into a narrower range of behaviors, a narrower band of operating skills. They've latched on to some things that seem to work and have abandoned other ones. I think part of the problem is that their earlier preparation did not expand enough and develop enough in a range of behaviors so that under the pressure of success and performance in a classroom situation, they tended to lapse back into the things that seem to work at that point.

What I am suggesting is that if we can, through this concept of a continuing opportunity to learn, focus on developing this broader framework of possible options of the teacher so that the range of ways in which they can approach a particular task is broader, they will see more option to not only see that they are there, but to practice them in a beginning sense rather than in a polished sense. Then it seems to me that they will be more likely to employ these and work with them than if they've not had that opportunity.

This leads me to support the notion that I think was implicit in Bill Drummond's remarks, that so often we take this global approach to teaching; we talk about it being so complex and so many-faceted and so demanding that really you can't ever take any part of it, zero in on it, and develop one skill at a time. I find a great deal of encouragement in some of the programs, like for example, the Stanford Micro Teaching Approach which can be criticized and is criticized by some on a number of grounds; but I think it is willing to say, "here are 15 or 16 behavioral skills that we think teachers ought to have some exposure to, and let's not look at all 16 of them at one time with a large group of children in a variety of subjects and circumstance, but get a small group of kids and look at open and closed structure questions; or look at the nonverbal communication; or look at this kind of skill or that kind and get enough contact and experience with it so that we begin to feel a little comfortable with that before we move on to another one.

That approach, I think, makes a great deal of sense and those of us who are Gestalt inclined, I think, tend to take a dim view of it, because somehow or another it is dealing with pieces rather than wholes. However, I think at some point it is essential to deal with the pieces if it doesn't, all of it, resolve into a kind of a confusing hodge-podge of things. This isn't to say that at some time you don't and shouldn't put it together. It says that we need to recognize that there are advantages to looking at and emphasizing certain facets of the whole at one particular time.

This leads me to the notion that we need to address ourselves much more in teacher education to the task of structuring and understanding what are the significant elements of teaching and what are the important dimensions of teacher education than we have been disposed to do. I think that when we neglect that facet of the task, it becomes very difficult to organize a systematic program of teacher education, and indeed it becomes more difficult to get various agencies cooperating. If you don't really have some kind of analysis of the business of teaching, it is pretty difficult to say the professional organizations ought to be engaged in these facets, or with particular emphasis on these, the school systems ought to be concerned with these; these are unique or special obligations of a college or university. If it's just one big, sort of confusing complex business, why the notion that one can build on another becomes a pretty unlikely thing and, of course, this is part of our problem today: that when we talk about cooperation between schools and colleges, many people are inclined to say, "What do you have to build on out in the school system? What do you know has happened to people? What can you count on having been in a program?" This is particularly complicated by the mobility factor, the fact that you don't have in a given school system persons all of whom came through a single program of teacher education. In Milwaukee, for example, where I spent a number of years, they had teachers coming from more than 200 colleges and universities.

This suggests to me one other point, and that is that I think we ought to take more seriously the obligations to think through and structure and reach some understanding on these basic aspects, or fundamental objectives associated with teaching skill. I think we have outlived the era when we can take comfort in the notion that there is something basically democratic, something basically good about every institution having its own private and special way of going about things. I think there is a difference between broad agreements on certain kinds of objectives and the materials and techniques and approaches that you use to communicate those objectives and build skill in them. That is the place where I think every institution ought to be unique and special.

But to assume that some of us think that this is an important part of teaching behavior and another institution or lots of other institutions think that this has nothing at all to do with the preparation of a teacher, I think is a rather chaotic situation which culminates and accentuates the crisis we have when we find teachers moving into school systems from hundreds of different institutions, and those systems then saying, "What do we build on in the preparation of a teacher?"

I find, then, that there is much worth in the proposal that Bill Drummond is suggesting to us, and I hope that we have an opportunity to explore it further.

David Colton, Director
Educational Field Studies
Washington University
St. Louis, Missouri

I'd like to respond to the speakers by raising two broad questions. First, I notice that both speakers use the term "systems analysis." While I think that the term has a great many useful applications in education, I am a bit concerned that we may abuse the term as we try to work with it. Dean Corrigan made a number of comments. He talked about systems analysis and indicated that he thought it would become rather pervasive within the next few years in education. He subsequently went on to describe a set of new teacher specialist roles which he foresaw.

Now I suspect that those teacher roles which he predicted were based upon a sort of systems analysis of what instruction was all about. Instruction, according to systems analysis, involves certain special tasks such as coordination of media, diagnosis, assessment, personnel coordination, etc. And so he spun out a range of roles based on a sort of systems analysis. What kind of a system was he talking about? That is, what ends was his system to serve?

I think the ends of the system that he was talking about are those that are identified with the post-Sputnik era in education; i.e., the ends were more cognitive training and certain intellectual skills--the types of emphases which we have seen in curricula in the past decade. Those are fine, but it seems to me that they are not the only, or even the most important, ends of education.

As I read the newspaper it seems to me the public is demanding more and more attention to other kinds of education--moral and civic. And I'm not sure what specialists are going to do to that kind of education. I'm not sure that they are going to be helpful. Shouldn't the education embrace more than just the cognitive kinds of skills that we have emphasized in the past decade? If, in fact, education involves certain moral and civic training, we have to account for that in our systems analysis. When we project educational needs, we have to be certain that we have taken into account provisions for providing this moral and civic education, which I really think is going to be demanded by the public.

Bill Drummond, I think, made a somewhat similar application of systems analysis. He acknowledged, as systems analysts must, that you have to have ends. And so he went to a teachers association and said, "What are the ends that you would like to see these prospective teachers prepared for?" He got a list of twenty-five. Why did it come from the teachers? Maybe it should have come from the community. There seems to be some evidence that teachers and communities have different conceptions of what education is all about. In the end it is the community that has the final say. So again, when we specify the ends of the various systems we design, we'd better be sure we are getting those ends from the right group, or at least that we are taking into account all those groups that we need to.

I think that as we apply systems analysis to the problems of supply and demand in education, we'd better be sure we use it in the right way or we can get stung. I keep thinking of that TFX or F-III fighter plane. McNamara forgot about the capacities of aircraft carrier decks. You know they just can't handle a thirty-ton airplane. And it's too easy for us in education to forget things that are a lot less obvious than that.

The second point that I would like to make is more a comment about what Dean Corrigan didn't say than what he did say. He was charged with the task of "blue skying," and I think he performed that task very ably. However, I think that blue skyers and conferences which bring blue skyers onto the panel are obligated to raise the question, "Who is going to pay the bill?" Blue skying is fine, innovations are fine, pilot projects are fine, demonstration projects are fine. But who in the world is going to pay for them? One of the things that is very clear from research on innovations in the past decade is that virtually any innovation that is worthwhile costs money, not only to install, but also to operate. In our thinking of supply and demand problems we haven't adequately considered the very simple problem, "How are you going to pay for implementing these new ideas?" I am not sure that the State of Washington is fully aware of what it is going to cost to translate its pilot project into a full-scale operation. I know that virtually all of us in education were completely unaware of what team teaching would cost when we were first tossing this idea around. I would have liked to have seen Dean Corrigan total up the cost of that team of specialists he was talking about last night. I suspect it would have curled your ears. So I think that as we think about supply and demand we need to take this other element into account. That is, we need not only new designs for satisfying supply and demand problems, but new methods for implementing those designs.

I might call to your attention such a situation in action. Up in Illinois they have had for five years now a program for improvement of programs for gifted children--a state-funded program. It embraces a whole sequence of events. It starts with some funds for experimentation and design of programs for gifted children. There are some funds provided for demonstration projects in which the new designs are installed in a handful of schools for others to go and look at. The state plan provides funds for teachers to be trained to use the demonstrations which they observe. Finally, the plan provides for state funds to support the cost of operating the new program for gifted children. In addition, there is a state staff to coordinate the "whole shebang." Now the plan has flaws in it in terms of operation. Nevertheless, I think the design is a good one. It does take into account this latter problem of not only designing an innovation but also paying for it once it is designed.

I'll stop on that note. One of the benefits of being the last panelist is that much of what needs to be said has already been said, so I'll not repeat it but simply stop here.

AFTER PANEL REACTION

Dr. Corrigan

I was very interested in the panel's reaction. There appears to be an area of special interest regarding educational personnel that might be worthy of at least another two-day meeting. I know it was the topic for discussion in a number of after-formal conference groups last night. It is the problem of not only changing the schools but changing the present approach to the preparation of educational personnel--changing the colleges. I don't think it is going to do a great deal of good to just add new projects outside the present piece of pie--the present school or college systems. It isn't going to do a great deal of good to just set up some more small experimental or demonstration projects and leave the piece of pie we now have the way it is.

Furthermore, I really did not perceive myself last night as being as "blue skyish" as some might think. In fact, the needs I was talking about last night are just as relevant for 1968 as they are for 1985. I think the real challenge we all have is to significantly change the present piece of pie--not just divide it up differently. This calls for reassessment of the fundamental purposes of education and the means to achieve them for all children. I can think of two excellent papers which expand on this point written by Dr. Werner Bloomberg of the University of Wisconsin at Milwaukee. One is called "The School as a Factory," and the other is called "The School as a Community." In "The School as a Factory" Bloomberg compares our present schools to factories. Students are judged as products; we put the real good ones over here and give them extra special attention, and we reject others. Fifty per cent of those learners in our cities who are of one color are neglected, and we reject 85% of the Mexican-migrant group. If the basic purpose of our schools was to produce dropouts, we would actually be doing a better job at that than we are at any other kind of goal. So I would like to suggest that we take another look at what we really do value. What should the purposes of the schools be? I don't think we need a great deal more research to give us indications of some of the things we ought to do right now to change the schools and teacher education. For instance, the research we have on "self concept" and the kinds of data related to the affective domain clearly indicate needed changes in schools and colleges. What we basically need as a profession now is the courage to act on thinking.

The degree to which we are able to move away from the grand systems of evasion which we have set up is the degree to which we will develop new programs in schools and colleges. I have heard at this meeting, just as in every other meeting of educators, the same reason for doing nothing: (1) it would set a precedent, (2) there is no precedent to guide us, (3) there's not enough "hard" data, (4) too expensive, (5) too controversial, (6) the community won't buy it, and (7) we don't have consensus. Unless we in the profession, the people who are supposed to have the knowledge, begin to take leadership, someone else will. More than likely the void will be filled by the loudest and most vociferous elements in society who do not necessarily represent the best interests of children and youth.

We had better realize that confrontation time is here. It is five minutes to midnight.

The situation in New York City today is going to have far-reaching implications for the profession. The kinds of questions black parents are asking school officials are very legitimate, and it won't be long before they will be asked by all parents, suburban as well as the city. If you watched the 11 o'clock news on TV last night, you saw an interview with a parent in the picket line surrounding a Harlem school. He was explaining what it was all about as far as he was concerned. He said, "Look, our kids keep going to school and they fail. They fail the first year, they fail the second year, and they fail the third year. Is that what a school should be?" We all know that's not what a school should be. As a parent I'm saying we can't have that any longer. What do we pay teachers for anyway? The confrontation ahead for all of us in this room and all other educational personnel can be summed up in two words (1) professionalism and (2) accountability. These words have a ring of great challenge and great promise to them. As working concepts they are inseparable--we can't have one without the other.

PANEL DISCUSSION

Dr. Drummond

I really needn't say anything after these fine presentations, but I would like to make a comment, a comment I made earlier this week in Baltimore.

One of the problems I have is knowing when I am successful at doing anything. It's the question the "hippies" keep asking, "What is success in life anyhow?" The question is simple enough, but it raises all sorts of additional questions and forces me to look at who I am and what I want to become. Am I successful when I get an "A"? Am I successful when I am so specialized and esoteric that I can't communicate with my colleagues? When is it that I am successful? Is it when I hold hands with my wife? When I sit peacefully and look at a landscape? When I throw a hand grenade? What is it that makes me be a success?

I think perhaps our biggest opportunity in education today is in helping people like me confront myself--so that I know something about me--so that by knowing something about me, I like what I know--so that I want to know more about me and feel confident that additional knowing will be okay--so that I can accept me--so that I can get on with the world and my perceptions of it.

What I'm talking about isn't new and may not be impressive, but it's important. Teachers need to learn how to get real "kicks" out of teaching, out of being a teacher. Teaching needs to be enjoyable and stimulating and an opportunity for creative folks to do their own "thing." What I'm talking about is crucial to a new frame for teacher preparation.

The students are saying to the university faculty, "You say you care, but you don't. You preach at us to change, but you won't." Whether we are students, faculty, administrators, or people from state departments of education, we want to be treated like we are somebody. Don't tell us we're somebody; treat us as though we were.

This is the challenge for a new design for manpower development in this country: to help me be me, and to let my special interests and energies work for the common good.

CONFERENCE REVIEW AND RECOMMENDATIONS

Joseph Young, Jr.
President's Commission on Educational Personnel Development
Washington, D.C.

Our group approached this task armed with all the intelligence that we gained from the last few sessions and tried to apply this in looking at our problem in terms of systems analysis, role differentiation, specialization, and respect for individual differences. You will, of course, come to your own judgment about what the yield may be from the application of any or all of these techniques.

I would like to do two things. First, to give some comments that we have shared about the conference itself. Jim Winter asked us to reflect on this a bit. We have done this and I will report our observations to you. Second, we have met with the leaders of the last group sessions of the conference (that is, the decision-making groups), and I shall summarize very briefly the major conclusions that the individual groups came to.

After the general report by me, each of us on the conference evaluation panel will speak briefly, reflecting on two things. First, some comments on issues which have been dealt with since last night; second, what implications there are for next steps in the generalizations or observations that were made in the course of the several sessions of the conference.

I think that the three of us agreed that our judgment about the conference could be summed up in two words: "just fine." I think everybody was impressed with the extraordinarily fine organization that Jim has provided. This certainly applies to his able staff as well. Jim certainly knows his people. He got a collection of speakers whose consistently good contribution I have not seen in a conference in a long while. A small matter, but each speaker was very disciplined about keeping within his allotted time. That is an extraordinary circumstance, it seems to me, in a conference, to the credit of the participants, was that, when the question periods came up, all the questions were questions. Usually one or two people have to deliver an oration from the floor. That didn't occur in this conference.

I think the conception of the conference--dealing with the topic at several levels--had an important contribution to the positive judgment we have made. For example, last night, Dean Corrigan talked about the abstract "pie in the sky," looking toward the future. Bill Drummond this morning dealt with "problems at the middle range." He looked at the big ideas but he devoted most of his time to their application to reality and developing that reality in the most informative way. Finally, we had sessions in the latter part today which dealt with relatively more specific things. So I think, in terms of level of concern, we walked around the problems in a very comprehensive way.

Some might have been troubled a little about the conference title. I think this is one thing that may have been of some concern to some. The language of "supply and demand" very often evokes in some minds the idea of explicit attention to the problems of numbers and quality of educational personnel produced and needed and to steps that should be taken to correct deficiencies. Not as much explicit attention was given to those kinds of questions in the last two days. For our part, we found that the excursions into the more philosophic and speculative questions prompted by this very title are things we are very comfortable with. I think most members of the conference would share that view.

In general, I think that the objectives of the conference were very well achieved. We do have one important suggestion. This conference was designed to take a very comprehensive look at a variety of issues related to the supply and demand of educational personnel. As we have indicated, this objective was well achieved. However, it might have been good to devote some time to getting into one or two of the issues in depth. This would have also made possible a joining of issues on some points at which speakers went by each other or where some inconsistencies in the position of a given speaker seemed apparent. Let me give you an illustration. Bill Drummond's presentation was an excellent exposition of systems analysis. When he completed development of his ideas, we all thought we had a pretty good idea of where he stood with respect to an approach to education. This approach implied an ability to be able to specify objectives quite precisely and to analyze both the process and the outcome of education in "scientific" terms. When he spoke today in a different context, we were quite surprised to find that he was a humanist after all. I do not recall his particular language here, but he was essentially talking about the importance of an education in which the individual was required to confront himself to the end that he would know more about himself so that he could like or be comfortable with himself. All this that he might become a "better human being." We all agreed that Bill expressed himself in very moving terms; what I have described does not do justice to his development of this position at all. However, the point I wish to make here is that the notion of systems analysis and the humanistic position he expressed seem, at least to me, to be antithetical. I think we would all have liked the opportunity to press Dr. Drummond on this matter, to see how he finds these apparently polar positions to be actually compatible. Pressed a little deeper, these issues might have come into sharper focus. Those are the comments we have on the conference itself.

Now I would like to report to you on the decisions that were reported to us from the leaders of the several groups.

First of all, Bob Bogen, representing Groups C and D, reported four quite explicit, quite discrete decisions. One involved the need for criteria by which innovative programs might be judged. This kind of concern, I think, runs through other decisions of this conference; indeed, there is hardly an educational conference one attends these days in which the question of "how do you evaluate?" does not come up. The group, however, in advocating this position, also offered a *caveat*. By all means, make changes, even though the state of the art with respect to evaluation isn't at a point where we can make definitive judgments. The second decision concerned the need for direction. When pressed on this, the group said that what was needed were some kinds of pronouncements from different agencies to get things moving; there was a sense of frustration that there wasn't enough forward movement in the community and the educational enterprise--movement which was forward, explicit, demonstrable, and definable. Here again, however, they attached a qualification. Whatever sense of direction was established, there was a need for it to be pursued in a flexible fashion. Third, the whole notion of staff differentiation presents a challenge to the state departments of education with respect to licensing and other regulations. Rigidities have built up, and these rigidities tend to frustrate new approaches to role definition and staff utilization. This matter needs attention. Finally, this group saw the need to develop "idea men." Whether we call them change agents or whatever, there is a need for people with fresh ideas to get more movement in the ways of innovation and advancement.

Charles Frazier, reporting for Groups E and F, opened his comments by saying that the group had a consensus about the fact that there was no consensus in the group. However, he then proceeded to report agreement on four or five points. Perhaps this was a special sense of honesty on the part of this group; they just didn't want to overstate their unity of views of certain matters. One of their principal concerns was the need for what they called a "broken-front" approach to educational change. It was inevitable, they felt, that in the general movement for innovation, there would be some people in the van; we should not be disturbed about this. We should not wait until the whole range of school systems of institutions of higher education would proceed at once on any given innovation. For example, some people believe that in connection with a phenomenon like differentiated staffing, there had to be a whole national movement proceeding in the same direction and at the same pace. The group rejected this idea, saying that there should be advanced in individual institutions that wanted to take the initiative. Second, we should urge school systems and other agencies to budget more energy and time in arranging for such things as the mixing of faculties, establishing dual responsibilities for individuals, etc. Third, the group emphasized the importance of coming to some agreement on broad objectives, allowing flexibility to individual institutions and groups so that they might have a special idiosyncratic approach in their particular endeavor. If we try to resolve all of the details at the lower level, no progress will be made at all. Fourth, attention was given to the possible kinds of contributions that might be made by CEMREL. One specific ideas was that CEMREL might serve as a catalyst for change in the public school system. This group saw CEMREL as in a peculiarly good position to exert an external force, or an invitation for change, from the outside which would get things moving in a way that would not be possible if this change had to be generated from inside. Finally, in considering matters of innovation, this group felt that both the preservice and the inservice aspects of teacher education should give attention to innovations. If either the new population of teachers being prepared, or the group of teachers who are presently in the school systems, was not being encouraged to entertain new ideas and new approaches, there would result a situation in which there were in effect two populations in a school system, each working from different premises and at cross purposes with one another. Hence, the importance of stressing innovation in the training programs for both groups.

Dave Colton, reporting for Groups A and B, said that there were about eight questions they had considered. He reported some consensus on about four of these. First, there was agreement about some very specific things and some very general things. In the first category, there was agreement that the transcript of the prospective teacher should be given much more attention at the time of employment. On the more general level, the group urged the adoption of new ideas in the teacher preparation curriculum. In the area of preservice training, the group underscored the importance of better articulation between the training received in the institution and the realities of the school system where the individual would be employed. Specifically, they suggested that the kinds of problems which the individual might encounter in a particular school system should receive special focus in the student teaching phase of the training program. Such student teaching experience should embrace as many of the possibilities and problems and as many of the types of student populations as the prospective teacher is likely to encounter. One specific suggestion which seemed intriguing was the idea of reducing the actual amount of teaching in the first year of a person's employment so as to leave more room for counseling and assistance than is presently the case. In effect, the first year would be more of a bridge between the period of training and the assumption of formal responsibility for teaching. Indeed, this group argued for more time for practicum or internship experience in the formal period of preparation for teaching. One idea that emerged from this group seemed truly unique. It was suggested that school systems pay to the institution or to the individuals for a better product; that the school systems pay a premium in instances where they employed someone who was judged to be truly superior. It was not clear in the presentation of this idea whether this premium would be paid to the teacher-preparing institution, to the individual, or to both. (Also, I should say, I am not sure whether this provocative idea had the full approval of the group in which the idea was discussed.) Another idea related to inservice training. This group suggested that universities, in their development of programs for inservice teaching, pay more attention to the needs of the schools. Indeed, the group felt so strongly about this that they suggested the institution not inaugurate an inservice program unless there was a full appreciation of the needs of the schools and developed ways for coping with these problems. Finally, the group called for more attention to the kind of functions performed by the National Council for the Accreditation of Teacher Education in its efforts to maintain and increase standards.

Don Thompsen's groups G and H reported that they thought in terms of priorities. One decision of this group is that schools project their needs for as much as thirty or forty years and then predict their needs in number, quality, and type of personnel on the basis of this projection. They also argued for a five-year program using school systems, state department, and higher education personnel in the development of criteria for employing and evaluating personnel in the schools. Other specific suggestions or comments follow: there is no shortage of teachers in terms of numbers, but there is indeed a shortage in quality; it would be helpful to undertake studies which would compare beginning teachers with beginners in other professional groups with a view to determining in what ways they were alike and in what ways different; we should develop consortia to draw more effectively on resources of clusters of institutions and school systems; finally, we should put more effort into the training of educational specialists. Again, CEMREL was identified as being in a particularly good position to be a catalyst in some of these endeavors, since its efforts were not confined to any one state. Special reference was made to the need for encouraging community college programs for the preparation of technicians. A concomitant need was to establish appropriate licensing for this group and in general make attempts to professionalize this new population of technicians for the schools. Appropriate means for dissemination of findings, particularly in programs (like Title III ESEA) which were geared to teacher education programs, was considered to be of utmost importance.

Joe Barrett reported for Groups I and J. He said that while the group ranged over a number of issues, they could not, despite valiant efforts, come to any firm recommendations which they would like to offer to the conference.

Now I would like to call on Ed to give you his observations about the conference sessions and about next steps for action as he sees the situation.

E. A. Cox, Superintendent
Maury County
Columbia, Tennessee

I would reiterate, of course, this is just one point of view. I haven't been lecturing for the last several years so I am not very articulate about the philosophical points of view in our society; therefore, I may not really be able to convey to you what I think I heard and what I think I concluded. I work forty-five miles from Nashville; I am hardly far enough away from home to be very expertise here. It is a rural school system with 435 professional personnel. As I listened to Dr. Corrigan, the question of blue skying or not blue skying, last night I thought it was kind of concluded that we were, and then this morning I thought it was kind of concluded that maybe we were not; so I decided again this depends on your points of view. It depends on where you are looking from as to whether or not he is blue skying; actually as for me he is orbiting the moon. But, for a sophisticated school system in many areas of the country, I am sure he is not even blue skying. Thus, I can't come up with an answer for all of us. So I won't point, since I think I heard him say, "Don't point, Buster, if you don't know where you are going." I would like to tie that to my own problem, though, as I see it. The public administrator today, in my judgment, is working for a society that doesn't know where it is going. I am not a politician, I hope. But look at our political situation today. We have three running candidates for President; we have a fourth who didn't get to run and, then there is a fifth group that is not satisfied with any of the other four. So at least here are five divisions, I suggest to you that some way or another, have some difference of purpose as it relates to the national scene and really to our way of life. Certainly to me this suggests the reason for, or is associated with, much of the unhappiness which we see about our public school system today. We are not in agreement on purpose, and, until we come some closer to agreement, it is going to be very difficult for any public administrator to weld the people together. Now maybe this is part of our role, and maybe this is everywhere, and we haven't functioned as we should.

Frankly, I am not experienced enough maybe in national elections to recall how things settle down after a national election. Quite frankly, I hope that they do and we are able to unite ourselves in a basic national purpose. I wouldn't want to be critical then, you see, of what Dr. Corrigan has said, because I think again it all depends on your points of reference here. And I guess I might be prejudiced about Dr. Drummond's, since I had the opportunity to sit in his class on a few occasions; I am sure not enough, and he would not like for me to admit that I had been there any. I regret that Tennessee lost him to Washington, but I am delighted to know about the mechanics of the program, which I understood he would work on when he left here.

I got confused as it has been alluded to here a little earlier and decided that maybe I didn't hear it exactly right. I heard this systems analysis projection all the way through till someone raised the question about evaluation. We have some consternation about it. I thought I understood him to say simply this, that the end product, the student if you please in the Bellevue system, would come out essentially with this conclusion that "I like myself." In other words, "The training program which has been afforded me has put me in a position in life where I like what I am." Well, I thought I could relate this to what Dean Corrigan had said in terms of reacting to the panel this morning, that he wanted to change the "piece of pie." The people who live and work around me--a lot of them don't want to change the piece of pie. Now this, I think, suggests that the local power authority or power structure or whatever you elect to call it, has one set of objectives, and the national power structure has another set of objectives. Our public administrator who is trying to work with these variegated power structures doesn't know exactly the direction to take. I guess I have to get reminded that people sometimes don't care how I feel.

Unfortunately, I have been involved in some recent litigation that I don't care to publicize except to say that they just didn't care a great deal in this litigation about how I felt about things. They wanted to know what the facts were. My feelings weren't important about this, and yet I thought maybe we were saying in all this that the end product of how a student feels about himself is important. Now I don't say this to be critical. I am here hunting for a better way to deal with personnel problems and to come out with trained people who feel better about themselves, and this will satisfy me to a degree, but I am not sure it is going to satisfy the power structure, and ultimately it seems to me that they have a way of saying what they want to say to us in terms of what they want us to do.

Again, for the fellow who hasn't had the exposure in philosophical orientation that I should have, I want to express my appreciation for having the opportunity to get involved maybe a little bit more, and maybe this will encourage me to attend more of these types of conferences where I might get a better philosophical exposure, which might in turn result in a better demonstration at the local level. Thank you.

Charles B. Watts
Associate Professor of Education
George Peabody College
Nashville, Tennessee

It is in order for me to preface my comments with an apology or explanation. I am now in only my seventh week at Peabody and, therefore, not qualified to speak for Peabody. I don't expect my excuse to let me off the hook, but maybe it will let my bosses off the hook. And I am sure you can see that it is most unusual and perhaps inappropriate that I am here on this final panel representing teacher education, having been in teacher education for such a short time. Ed may be forty-five miles from home and, therefore, misses by five miles being an authority, but for some of you I miss by ten or fifteen years being an authority. Having spent the last twelve years, however, in public school education--three months ago as a superintendent as many of you--I hope I have a dual perspective on the topic that we have been discussing at this conference from both the operational level in the public schools and now in a new role at the teacher preparation level.

The major benefit of this conference has been the opportunity to hear Dr. Corrigan and Dr. Drummond. Regardless of how you may agree or disagree with their remarks, I think you would consider the experience a benefit. For me personally, I would say that I have had an extra benefit by having this association with Dr. Young. To top it all off, Ed and I share the distinction of the same types of litigation in the very recent past; therefore, we can share many practical experiences.

In terms of our role as reactors and reviewers following the conference, let me start with some specific suggestions regarding CEMREL's role for follow-up on this conference and then conclude with some of my personal general observations.

As an initial follow-up activity, I believe that all conference participants could profit from some type of follow-up commentary (newsletters, communiques, etc.) relating the thoughts of Dr. Corrigan and Dr. Drummond about this conference. They presented us with a pair of keynote addresses, and now they have sat and listened and watched as we have chewed and digested their remarks--and in some respects mutilated the ideas that I can imagine might be their attitudes. They might be able to give back to us some reaction that they would have after-the-fact. From my own experience as a conference speaker, I know that when you are on the plan going back you have some of your best ideas, or after you get back you often say, "Gee, I wish I had said this or that."

Since we are all interested in teacher preparation, either as consumers or producers, activities such as on-site visits to certain model or innovative teacher education programs might be sponsored by CEMREL.

A number of regional agencies are providing a personnel selection clearinghouse function. As another specific outcome of this conference, CEMREL might serve for this large region as a clearinghouse to collect and disseminate information about school system personnel needs. On a weekly or monthly basis, in the spring and summer, local schools could communicate to CEMREL their actual personnel needs and the colleges and institutions preparing teachers could communicate information about prospective teacher graduates. In this way CEMREL might bring the teacher, the client, and the system together.

One other thing would be a kind of replication of the Washington State Bellevue program in this area. Perhaps this would be unnecessary, but I know that products tend to "sell" much more legitimately if they are "market-tested" right in the immediate area.

Another item might be the identification of what the consumer would regard as the highest quality conventional teacher training program. We have heard, last night and this morning, about ideas concerning more novel, more unusual, innovative teacher preparation programs. Having been a superintendent, however, and knowing how we "talk shop," almost any superintendent can identify for his cohorts the teacher training institutions that are preparing generally the best prospective teachers. These need to be looked at in terms of identifying potential highest quality conventional teacher training programs. For those of you who are convinced that we are doing a good job, that we should want to simply do the present job better, than let's identify the best of what exists now as one alternative approach to the approaches suggested last night and this morning.

In addition, a project promoting the expansion and improvement of teacher education, recruitment, and screening might be in order. This matter of recruiting prospective teachers came up several times in the different groups that I visited. In education we do far too little within our own systems promoting the idea of education as a profession. Perhaps our schools have some little future teacher club, usually one of the least glamorous and least supported organizations within our school. We really do not act as if we want people to come back into education as a profession after they have graduated from our systems. Certainly CEMREL might perform a role in this area in terms of promoting the idea of teacher recruitment and then also in the similar matter of screening. The time should have passed when anyone who can breathe, anyone who has somehow managed to gain admission to a college, is admitted to the teacher education program. Screening needs to be a much more thorough identification process than what occurs in most places.

Another suggestion which several of us discussed was a possible follow-up conference of this same group, perhaps, or a similar group. Some people seemed to want to participate again in a more in-depth, more specific problem-attack type of conference where the whole orientation and organization would focus on two or three specific problems, problems that may have come out of this initial conference.

My last suggestion may be procedural, for it may be that it is planned and I am simply not aware of it; rather than just have the three of us react and recommend, I think each individual who has participated might also provide some feed-back evaluation of this conference--just what was good about it, what was not so good about it, what other suggestions you might have.

I think that covers my specific suggestions, my specific comments. Now for my more personal general observations. I am going to live a little dangerously and perhaps point just a little bit. As Dr. Corrigan mentioned last night and Ed repeated a few moments ago, I realize when you point you have to know where you are going. When I am pointing, I think I know where I am going--it may be out the door feet first; however, I have grown accustomed to that position and that process. You don't become a school administrator or superintendent without adjusting to it.

In presenting my personal observations, I realize they are generalizations--the shoe may not fit, but if it does let's get something positive from it. I did hear throughout the sessions two chronic excuses. Having been in education twelve years now, I am disappointed to say that I have heard these same excuses for all twelve years--some of you have heard them for thirty. That makes it only worse, not better.

The first chronic excuse is the constant cry of, "where is the money coming from." As we in public education have gradually inched ahead, not really keeping pace with change in other areas but changing just as the slowly aroused conscience of the public would allow, we continue to come up with this question of where the money is coming from. I think we should no longer be timed about this matter; thirty-one billion dollars is nowhere near enough for public education. If we are committed to it as much as we say we are and if the public is committed to it as history has tended to indicate, there is no reason why we can't spend 100 billion dollars in this country for public education. Where would the money come from? We are already spending it--for other things (war, welfare, wealthy extravagancies, entertainment, intrigue, "dollar diplomacy"); we certainly could not spend it for anything better than education. Instead of grumbling among ourselves about where it is coming from, we must speak as one voice and say where it is needed and what it must come from.

The second chronic excuse is that we just cannot somehow identify or measure our product. This, too, you hear at every conference you attend; yet I would say that we do identify and measure, perhaps not with a yardstick, not with some testing instrument--there is hardly a principal, the smallest district or the largest, there is hardly a superintendent, who doesn't evaluate himself, his system, his teachers. He knows who is producing and who isn't. We are identifying our product; we just don't have the guts to do anything decisive about it. If we are doing it, then let's begin to benefit from that process. Let's use what we have already developed in terms of identification. The research is there--it's not neatly tied up in a single package that tells you what to do with your left hand and what to do with your right--but the knowledge is there if we will only use it.

Another general observation is that too many educators have an affinity for self-delusion. From my personal viewpoint, one suggestion about the organization of the conference might have been to have closed last evening with the one address by Dr. Corrigan. I for one was highly motivated, was very strongly influenced by Dr. Corrigan's remarks. My mistake was in going to the follow-up discussion. For there the chronic excuses began and the self-delusion appeared on the scene. Self-delusion in the form of the defensive viewpoint that the remarks of the so-called "blue-skyer" at this point lacked current relevance. My reply is that to whatever degree you did not see the relevance in the remarks last evening, to that degree you are in difficulty wherever you are.

As Dr. Corrigan pointed out this morning, he did not really see his remarks as "blue-skying." The things he cited are happening now. These were personnel designs for yesterday and today, not really for tomorrow. The designs for tomorrow will come beyond where he was pointing for us. There should have been great relevance for every one of us in what he said, if we will quit making excuses and start moving with the promise that is there.

A second type of self-delusion--one that we find special comfort in during the late evening hours--is that things really aren't too bad. They really aren't too bad, but in relation to what--in relation to the past, in relation to the present, or in relation to the future? We are preparing teachers better than before, but what are the demands that those teachers have to face? Are these not far more severe, far more complex than ever before? Are we keeping abreast really with the task that we have? And, rather than fall back on the comfort of "Well, things really aren't too bad," let's find out what is good about them, what is bad about them, and correct the bad as we identify it.

A third self-delusion--and I didn't hear this too much, but just for the few occasions I did hear it I would urge that it be put to rest--is the wishful thinking that change or innovation may somehow cost less. I don't think you can really find much support for that; it would be comforting if somehow we could "build a better car cheaper" or somehow we could provide a better education cheaper. I don't see any evidence for that in the past or in the present, and I certainly can't predict any for the future. In fact, most change or innovation opens new opportunities for us and, therefore, cannot help but cost more.

In terms of where to start, and I am winding very quickly to the conclusion of my more unpleasant general observations, any beginning is important--where to start from this conference, where to start for each one of us. The expressions, "I can't, we can't, they won't," have not been characteristic of America; they need not be characteristic of education. It was not in the character of Horace Mann to refuse to make decisions, to refuse to blaze new trails, or we might not have public education yet. I think that each of us must start within our own present role and system. We need not worry. If I am the superintendent of a small school district, I need not worry too much about implementing new ideas in a large school district or nationwide, but I do have a responsibility to start within my own present role and in my own present system to do as much as I can, not operating in terms of images and myths and wishing it were some other way, but taking the action I can to change my own situation the way I feel it should be.

And then in making my concluding remark in terms of an observation concerning the systems approach, I have to admit my own bias. For quite a few years now I have found much promise in the systems approach for education. I would say that everything that is happening around us, throughout our entire style of living, involves an increasing necessity for systems analysis, systems design, planning, directing, information processing, communication, and an absolute requirement for self-discipline and for self-evaluation. And, idealistically perhaps, I still have the faith that a tremendous amount of what is great and individualistic about our humanity can live and operate within the context of a systems orientation. Systems work is here now; it is a reality today. It is ridiculous to continue to argue whether or not this is a meaningful aspect in our whole educational field.

The points that I have made here I would summarize with just one major point. This conference, perhaps, has been a beginning; this has been a kickoff. It didn't answer your problem about what to do tomorrow. I don't know that anyone can answer that except yourself. I have to answer it for myself and my particular role. We still can't find someone else to do the job for us. It still is ours to do.

Joseph Young, Jr.
President's Commission on Educational Personnel Development
Washington, D. C.

Thanks, Charles. Let me now offer some concluding observations about the conference and suggest some next steps based on the implications of what we have been talking about for the last two days.

My opening comments will illustrate that while the three members of the panel found themselves in agreement on most things, and certainly amicable about all, we did not agree on some of our observations. Charles has just addressed himself to the matter of systems analysis and has taken a definite position. With respect to that position, I think I would have to say in all candor I could not disagree more. I found Bill Drummond's exposition extremely intriguing and, indeed, exciting. It's nice to see a good mind moving back and forth between the abstract and the concrete and to find unusual competence in the grasp of a difficult field. This Bill did; and he also gave us the bonus of delivering his remarks in such delightful style. Despite all this, I find myself being terribly disquieted by the idea of so much attention being given to the application of systems analysis to a field like education. As I see this phenomenon, every part of the human endeavor in education would be expressed in the most precise terms. This would apply to role definition, performance objectives, criteria, and indeed specification of task down to rather minute pieces of behavior. For example, Bill mentioned in one context specifying 20 to 25 tasks that the prospective teacher would be required to perform at a certain level of proficiency. I do not deny the appropriateness of applying systems analysis to certain kinds of human endeavor. Furthermore, it seems to me that the field of education could benefit by more careful attention to the objectives that we set out to accomplish. However, I seriously question whether it is an appropriate means for us to apply all the elements of the system to a field like education. I suppose it depends in large measure how you define teaching and what you are trying to teach. It seems to me that, if you conceive of teaching as a search for meaning undertaken by someone called a teacher and someone called a learner, this has to be a highly idiosyncratic process or experience. By definition, systems analysis seems to be alien to this kind of human experience. At the present time, the application of systems analysis to a field like education has not developed to the point where it is easy to see why we should be concerned. However, the more proficient we get at this mode of conceiving of and evaluating education, the more will it begin to close out options, rule out spontaneity, and minimize creativity on the part of the individuals involved. We are increasingly looking for efficiency in all aspects of American life. If you wish to get a sense of how frightening the outcome of this increasing movement is, I suggest you read a book by a French author, Jacques Ellul, called Technological Society. This whole book is addressed to the thesis that technique has taken over in all sectors of life. What he means here essentially is that the "efficiency of the means" is now our god; that goals are not looked at in terms of their intrinsic worth, but rather in terms of whether they can or cannot be carried out efficiently. I think we have to give sober thought to this notion lest we lose something very precious in the educational process.

It seems to me that in education, at least at the elementary and secondary school level, we are possessed with the idea of measuring things. I know of no such preoccupation in other professional fields. When one makes a judgment about the competence of a doctor or attorney, he does not seek some statistical data which indicates how many correct diagnoses have been made or what the win-lose ratio of an attorney has been. Rather, we have developed a set of arrangements whereby only the most able are permitted to enter the training for these professions. We have also developed a set of extremely high standards against which the practitioner measures his own behavior. These professions have been successful enough at this approach such that the public, by and large, has confidence in the quality of practice offered. I recognize that there are practitioners in these professions whose competence or integrity is not the highest. However, it would be a sad day if we began to view their behavior in terms of "behavioral outcomes" and set up very precise measures of their activity to determine whether they matched some standard of achievement. The idea of measurement, behavioral outcomes, and accountability are all fashionable notions today in the field of elementary and secondary education. I merely wish to ask that we consider carefully the question of how far we wish to go in these directions. May I suggest further the possibility that this preoccupation with measurement is due fundamentally to a lack of confidence on the part of those served by education. As a result, we feel obligated to justify ourselves as practitioners in terms of some kind of measurable outcome. I am not suggesting that we abandon all efforts to evaluate or make judgments about teachers and teaching. What I am saying is that it is potentially pernicious. A final comment. May I suggest to you a short article by Professor William Arrowsmith, entitled, "The Future of Teaching," in the Winter 1967 issue of The Public Interest. In this article Professor Arrowsmith describes teaching and the teacher in terms that could never lend themselves to any kind of measurement. Yet, I think that all of us would agree on the kind of model that Professor Arrowsmith is describing.

The second general point I would like to make concerns some of the remarks by both of the principal speakers, Dean Corrigan and Bill Drummond. Each was suggesting for our consideration new concepts that might be applied in education. In each case, these new ideas were being suggested as replacements for concepts or arrangements now entertained or practiced. For example, Dean urged us to consider differentiated staffing as opposed to the concept of self-contained classroom. Bill Drummond was asking us to consider systems analysis as opposed to presumably a more impressionistic approach to decision making. Implicit in the acceptance of the new concept is the notion that the old concept was somehow inadequate to the needs of the institution. I think we should all be open to new ideas. On the other hand, I am merely suggesting here that before we reject the old concepts, we make an honest effort to determine whether it was the concept which was at fault or the quality of execution or application of that concept in practice. Very often it is easier to shift to a new idea than it is to try to make the old one work. I often think that if we were to exercise as much imagination and put forth as much vigor in making an idea work as we do in developing new ideas, more substantial advance would be realized.

Third, a number of references have been made during this conference to the importance of formal arrangements for inservice training. In this connection, there was considerable discussion about the auspices under which such formal inservice training should take place. That is, should it be the university or the school system or the professional association which sets up and carries out inservice training. I was distressed that at no time was the idea advanced that we develop an atmosphere in which the individual practitioner undertook to provide his own "inservice training" spontaneously. We are so preoccupied with the idea of setting up formal arrangements and requiring that individuals take advantage of these opportunities that we do not ask how we can develop a professional who is self-generating, a continuing inquirer; one who by a realistic assessment of his needs and potentialities undertakes to provide his own "inservice" development.

Finally, I should like to make reference to Dean Corrigan's comment of last night. You will recall that he was outlining some new ways to use personnel more effectively in connection with our present educational needs. He also suggested he was going to outline what the uses of personnel would be like when we define the nature of the educational enterprise in the future. It was unfortunate that there was not enough time to pursue this second question. The changes in society, some of which are only now becoming apparent, will fundamentally alter the nature of our society and the way we live out our lives. Certainly, this will have the most profound implications for education and more particularly for the nature of the educational personnel in that effort. Obviously, there are great implications in all of this for the relatively mundane matter of supply and demand. So much for my observations about the conference proceedings.

Four implications occur to me with respect to next steps.

First, it seems to me that much of what we have said over the last two days has very direct implications for regional laboratories such as CEMREL. Increasingly, the new ideas we are entertaining represent complexity. I am speaking of such endeavors as developing and evaluating things like team teaching and applications of systems analysis to education. It seems to me that in undertaking to develop and test such new schemes we have three objectives in mind. First, we wish to determine whether the advantages suggested by the proponents of any given approach are in fact evident when the idea is carried into action. Second, we wish to determine what disadvantages, or side effects, may be necessary concomitants of the gains achieved. Finally, we wish to develop a concept or arrangement in such a full form that a school system or institution of higher education may, with relative ease, adopt the idea. These objectives will not be realized unless there is an agency like the regional educational laboratory with resources sufficiently large to carry out such endeavors. I do not see how an individual school or college can do this successfully.

Second, we must do a more effective job of determining what the schools should do and what the institutions of higher education should do in the training and development of educational personnel. I would suggest that the schools concentrate on the art of doing and the colleges accept responsibility for the conceptual and theoretical realm. At present, each is trying to take on both tasks and neither is doing them well.

Third, we have to get much more sophisticated in collecting manpower data. At present, we present manpower information in such gross form that it has relatively little meaning. We can show that we have a surplus or shortage of elementary school teachers, but we cannot tell what the situation is with respect to elementary school teachers for youngsters from low income families. We must also determine manpower needs as defined by principals and superintendents. Currently, we define the situation solely in terms of enrollments of students and projections of need based on such enrollment trends.

A final comment concerns the costs of providing a good education for the nation. In this conference, we have talked about a number of innovations and additions to educational effort. We simply must put a price tag on these new efforts and convey to the public what a really good educational system will cost. And, in speaking of cost, I am not only talking in terms of dollars, but also in terms of allocating to the elementary and secondary schools the number and quality of personnel needed to do the job.

ROSTER OF CONFERENCE PRE-REGISTRANTS

Name	Title	Institution
Group A		
Bob Neil	Director	Project Mid-Tenn
Tate Page	Dean, College of Education	Western Kentucky University
W. A. Book	Superintendent	Thompsonville, Illinois
W. A. Shannon	Superintendent	Kirkwood, Missouri
John Folger	Executive Director	Tennessee Higher Education Commission
Louis H. C. Laukhuf	Associate Superintendent	Jefferson County, Kentucky
Dean Corrigan	Bureau of Educational Personnel Dev.	U. S. Office of Education
Glen E. Kelley	Academic Dean	Belmont College--Nashville
A. T. Pate	Phi Delta Kappa	Peabody College
Group B		
David Colton	Educational Field Studies	Washington University
E. R. Purdom, Jr.	Superintendent	Danville, Kentucky
Lewis J. Hilliard	Principal	Mt. Vernon, Illinois
Mrs. Jane Wilhour	Assistant Prof. of Education & Psych.	Lindenwood College--Missouri
Doyle Gaines	Superintendent	Macon County, Tennessee
Brother Camillus Dufresne	Dean	Christian Brothers College
Glendon McAlister	Assistant Director	CEMREL--St. Louis
Howard Baltimore	Phi Delta Kappa	Peabody College
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Raymond T. Jones	Assistant Personnel	Granite City, Illinois
Martin B. Garrison	Superintendent	University City, Missouri
Lyman Burbank	Director of Teacher Education	Vanderbilt University
E. M. Tipton	Secondary Education, Area II	Metro Nashville
Pete Pere	Department of Education	State of Tennessee
Charles W. Simms	Chairman, Division of Education	Union College--Kentucky
Calvin Atchison	Phi Delta Kappa	Peabody College

Group D

Billy Alsobrooks	Director	Project REACHIGH
Mrs. Beulah Fontaine	Director, Program Development	Kentucky Education Association
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Joseph Young	Executive Director	Committee on Educational Personnel Development
John Goeke	Assistant Superintendent	Kirksville, Missouri
Thomas C. Whitfield	Director of Teacher Education	David Lipscomb College--Tennessee
J. Marlin Goodman	Superintendent	Giles County, Tennessee
Carl D. Patterson	Vice President for Administration	Christian Brothers College
Wade M. Robinson	Executive Director	CEMREL--St. Louis
Walter Merz	Phi Delta Kappa	Peabody College

Group E

Charles Frazier	Director of Personnel	Metro Nashville
Keith E. Stapley	Assistant Dean, School of Education	University of Missouri--Kansas City
George Denemark	Dean of Education	University of Kentucky
Bob Eberle	Assistant Superintendent	Edwardsville, Illinois
Calvin Anderson	Administrative Asst. to Superintendent	Clayton, Missouri
Jack D. Lawrie	Acting Dean of Applied Arts	University of Chattanooga
Rev. Paul J. Morris	Superintendent of Education	Diocese of Nashville
John Henry Smith	Department of Education	State of Tennessee
Benjamin E. Carmichael	Director	Appalachia Educational Laboratory
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Group F

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John R. Dosier	Administrative Assistant	Belleville, Illinois
Geraldine C. Hufker	Admin. Asst. to Dir. of Teacher Ed.	St. Louis University
Edward Pratt	Dean of Demonstration School	Peabody College
Tom Savage	Dean, College of Education	Austin Peay State University--Tennessee
Robert D. Neill	Associate Dean of Graduate School	University of Louisville
Howard Russell	Associate Director	CEMREL--St. Louis
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Group G

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Arvin Blome	Director of Educational Research	Western Kentucky University
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Edward Clark, Jr.	Associate Dean, Education Programs	Webster College--St. Louis
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David A. Wilson	Assistant to the Director	Cooperative Educational Research Laboratory
Sister Mary Hugh McLarney	Chairman, Education Department	Fontbonne College-St. Louis
M. J. Turck, Jr.	Chairman, Department of Secondary Ed.	Tennessee Tech University
Mrs. Willie Looney	Coordinator of Personnel	Chattanooga, Tennessee
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Group I

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M. D. Williams	Dean, School of Education	Tennessee A & I State University
W. H. Patterson	Area Superintendent, District II	Metro Nashville
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Charles Watts	Associate Professor of Education	Peabody College
G. H. Waters	Area Superintendent, District I	Metro Nashville
Fred V. Standley	Superintendent	Jackson, Tennessee
Donald C. Madson	Assistant Dean	Southern Illinois University--Edwardsville
Al Williams	Phi Delta Kappa	Peabody College
Jim Winter	Assistant Director	CEMREL--Nashville

CEMREL "SUPPLY AND DEMAND" SURVEY SUMMARY

In preparation for the CEMREL Conference on "Supply and Demand for Educational Personnel," a questionnaire was formulated and sent to the ten largest school systems in each of the four states in the CEMREL region, or a total of 40 school systems. This report summarizes information obtained from 28 of those school systems. The questionnaire had ten basic questions. This report follows the same basic format. The question is listed and the response is tabulated and summarized.

1. *How Many Educational Personnel Are Employed By Your School System?*

The 28 school systems reported the employment of 39,245 educational personnel. Thus these 28 school systems represent 41% of the teachers in the CEMREL area. Six of these school systems represent 30% of the teachers in the CEMREL region.

2. *How Many Persons Are New To Your School System This Year?*

The 28 school systems reported 4,609 new educational personnel. Of the schools responding, only one had not added new personnel to their system and one system had added over 800 new personnel. These 4,609 new personnel, including replacements and new positions, represent 11.7% of the grand total of educational personnel.

3. *What New Educational Personnel Roles Do You Have This Year That You've Never Had Before?*

Twenty-eight different positions were listed in answer to this particular question. It was felt that it would be of interest to list all of those in this report.

1. Ass't. Superintendent for Federally Related Programs
2. Administrative Ass't. to the Superintendent (General Admin.)
3. Assoc. Superintendent for Community Relations
4. Director of School - Community Programs
5. Director of School - Community and Student Relations
6. Director of Community School
7. Director of Adult Education
8. Director of Pupil Services
9. Director of Work-Study Program
10. Director of Instructional Materials
11. Ass't. Director of Elementary Curriculum
12. Coordinator of Vocational Education
13. Coordinator of Mathematics
14. Coordinator of Athletics
15. Elementary Guidance Counselors

16. Curriculum Specialist for Follow-through Program
17. Reading Specialist
18. Remedial Reading Instructor on Secondary Level
19. Instructor in Vocational Welding
20. Instructor of Vocational Building Trades
21. Program Developers in Title I Elementary Grades
22. Kindergarten Teachers
23. Teacher of Brain-injured Children
24. Psychology Intern
25. Social Worker Interns
26. Attendance Officer
27. Teacher Helper in Primary TMH
28. Half-time Elementary Secretaries

4. *How Many Of Your Last Year's Educational Personnel Losses Were Due To What Various Things?*

A total of 4325 losses were reported by the 28 school systems. The following items were listed most frequently and the percentages of each are tabulated according to the four states in the CEMREL region and of the total.

Reasons for Personnel Losses	Ill.	Ky.	Mo.	Tenn.	TOTAL 4325 Losses
1. Moved out of city	19%	32%	32%	35%	33%
2. Maternity	15%	16%	13%	20%	17%
3. Marriage	5%	12%	18%	5%	11%
4. Retirement	20%	10%	11%	9%	10%
5. Undetermined	12%	13%	3%	5%	8%
6. Further education	5%	1%	8%	6%	5%
7. Changed systems	6%	0	6%	5%	4%
8. Changed professions	8%	5%	.5%	3%	4%
9. Emergency 1 yr. permits	0	1%	1%	1%	1%
10. Death	1%	1%	1%	1%	1%
11. Health reasons	1%	0	0	2%	1%
12. Unsatisfactory services	2%	0	.5%	.5%	.5%

5. *What Were The Most Difficult Assignments To Fill This Year?*

There were 30 different assignments listed, however, the five assignments most frequently listed in rank order were:

1. Special education
2. Mathematics
3. Industrial arts
4. Physics
5. Elementary education

Sixteen of the 28 school systems reporting listed special education as being the most difficult assignment to fill this school year. Fourteen of the systems listed mathematics. It seems of significance to note that in the four state area, three of the states were rather consistent in their listing of assignments which were difficult to fill. The one exception was the state of Illinois which did not list physics, mathematics, nor elementary education.

6. *Which Subject Matter Field or Instructional Area Is Most Frequently In Need Of Replacements?*

The five most frequently listed areas in rank order were as follows:

1. Elementary education
2. Mathematics
3. English
4. Special education
5. Science

The four states were fairly consistent in this report with one notable exception. Several systems in Missouri listed the field of English in such numbers as to place it third in the most frequently listed group. In Tennessee, each system that reported listed primary or elementary education teachers as frequent turnover positions.

7. *Which Educational Personnel Roles, That Are Not Primarily Instructional In Nature, Have The Highest Turnover Rate In Your School System?*

A total of 12 assignments were listed under this question. Only guidance workers were listed in all four of the states. In rank order, the three most frequently listed were:

1. Guidance workers
2. Social workers
3. Psychologists

8. *What Are Specific Questions That You Would Like to Hear Discussed At The Conference?*

   1. Please discuss what is meant by para-professional. What are suggested salary ranges for these people? How are they best identified, trained and financed?

   2. How many school systems are utilizing data processing in retrieving personnel data? How can such a system be established?

   3. Are there tested techniques for evaluating written references for educational personnel?

   4. How can we encourage colleges to counsel prospective teachers into fields where there is a need rather than into social studies?

5. What is being done in the way of counseling college students to help them become aware of the shortages in specific fields?

6. What are the ways teacher training institutions and public and private schools can cooperate in preparing the kind of teachers needed to meet the changes developing in education?

7. What are recent solutions to handling supplemental pay for coaches, band directors, special teachers, etc.?

8. How can we make teachers realize that a contract works both ways?

9. Are there some good methods for developing top administrative personnel from within your own system?

10. How can we accomplish nation-wide teacher certification?

11. Can we realistically expect to solve the problem of having teachers readily available at the point of need which shifts so rapidly? Or should we put more stress on retraining?

12. What role can an organization such as CEMREL play in helping alleviate problems of communication between the producers and the consumers of educational personnel?

SELECTED STATEMENTS ON "SUPPLY AND DEMAND FOR EDUCATIONAL PERSONNEL"

A Tennessee Education Association Survey reports:

1. Thirty-six of the thirty-nine degree granting colleges and universities in the state of Tennessee granted 10,296 bachelor degrees to their 1967 graduating classes.

2. Only thirty-three per cent of the 1967 bachelor degree graduates prepared-to-teach. This is the smallest per cent ever for the eight year history of the survey.

3. Of the 3,429 prepared-to-teach graduates, 74% or 2,512 not only attended Tennessee colleges, but were also Tennessee residents.

4. In the state supported colleges and universities an estimated 69% of their prepared-to-teach graduates were native Tennesseans. (Tennessee A & I State University not included)

5. At least 1,037 of the prepared-to-teach graduates (31%) left Tennessee to teach.

6. Only four out of ten prepared-to-teach graduates are known to have entered the classrooms of Tennessee.

7. Teacher recruitment teams and individuals from 246 school systems in Tennessee and 820 representatives from out of the state of Tennessee visited the campuses of the colleges and universities involved in this study.

8. Each college and university in this survey averaged ten visits per year from out of state teacher recruiters; the visits ranged from a high of twenty-nine to a low of five.

An Educational Forum article by Martin Bartels reports:

1. The greatest demand for teachers in 1965 was in general science, physics, library science, elementary teaching, mathematics, chemistry, and English.

2. Areas where the demand is great, though not so acute, were journalism, industrial arts, foreign languages, high school total, women's physical education, commerce, and home economics.

3. Indexes for individual fields vary sharply from year to year. Library science illustrates this very effectively, as do physics, general science, and journalism.

4. General declines have occurred since 1955, but the demand is still well in excess of supply. While 1966 data are not available, there is evidence of a sharp upturn from 1965 to 1966.

5. Indexes for fields like library science, journalism, and physics are somewhat unreliable due to the fact that supply is measured in terms of "majors" whereas demand is often met by candidates with "minor" preparation in their fields of teaching.

6. The indexes produced coincide rather well with demand studies in higher education fields, as well as with observations in the field of business and industry employment, where an acute demand exists for people qualified in scientific, mathematic, and linguistic abilities.

7. The index is useful to future teachers indicating employment strength in various fields of teaching. Similar tables could be developed for individual states where data have been consistently tabulated during recent years.

8. One of the most hopeful outcomes of this study is the possible adjustment of vocational choice so as to remedy existing extremes in demand indexes.

9. Thirteen teaching fields showed a decline in index in 1965, while eight fields showed larger indexes.

10. The eight areas where the index actually rose in 1965 were physics, general science, chemistry, industrial arts, commerce, speech, agriculture, and high school total. If special education were included, it is likely that its index would be at the top of the list.

11. The areas where supply exceeds demand to the greatest extent are: speech, men's physical education, biology, social studies.

12. To ameliorate oversupply, we suggest to future teachers that they seek combinations of subject areas of low demand with other subject areas which are in strong demand. For instance, men's physical education with mathematics or science; biology with physical science; social studies with English, and speech with English.

The Shape of Education for 1968-69 reports:

The "average teacher" in public elementary and secondary schools--if one can assume there is an "average" person--was born sometime in 1930, at the beginning of a deep and grave economic depression, and has lived through a succession of wars, unprecedented economic prosperity, and inflation.

He, or she, has seen this country's population grow to over 200 million, a gain of more than 78 million, and the total enrollment in schools grow from 25.7 million to an average daily attendance in the public school of 40.6 million, a gain of 15 million. There were in the schools in the year in which he was born 880,000 members of the instructional staff, including

843,000 classroom teachers. These figures had grown by last year (1967-68) to 2,038,821 members of the instructional staff, of whom 1,837 were classroom teachers.

The statistics indicate what has happened in the lifetime of our "average teacher" which has made education a news story in the sense that it never was before--with pressing financial problems, strikes, sanctions, civil rights, demands for quality education, integration, and compensatory education to remedy the inequality which existed, and still does, for many Negroes in the South and in the ghettos of our major cities.

One conspicuous element in the picture is that in the 1929-30 school year there were 140,000 men teachers, and last year (1967-68) there were 583,337. As Sam M. Lambert, executive secretary of NEA, said a few years ago in testimony before Congress, the old stereotype of the school teacher is no longer valid. "The typical school teacher in the United States is no longer a sweet young thing in her early twenties who lives with her mother and father at no cost to herself," Lambert said. "She is not a person with only two years of college (normal school) training. Her working day is not a six-hour arrangement and she doesn't always have a three-month vacation, even without pay. The typical teacher in the American public school is both mature and well educated . . . ." There was enough in that 1961 statement, and it is even more true today, to account for the "militancy" of the educational profession which still puzzles some unenlightened members of the public.

Lambert's "sweet young thing," a woman teacher, is now 40 years old, on the average. The average for men is between 33 and 35.

- Instead of two years of college training, today's teachers (nearly 93 percent of them) have at least bachelor's degrees, and nearly 24 percent have a master's degree.
- Instead of the 6-hour day (which amounts to a 30-hour week), today's teacher puts in 47.4 hours a week.
- Instead of three-month vacations, nearly a third of all teachers report they have to earn extra money during the summer, and more than 58 percent of the men teachers do. Nearly 30 percent of all teachers also report earning extra money during the school year, some obtaining the extra money during the school year, some obtaining the extra duties from their own school systems. And, of course, many go back to school themselves in summer.
- Instead of living with "mother and father, at no cost to herself," today's teachers are frequently married, often with children to support. A fourth of the men teachers are married, and 45 percent of the women.

Public schools cost the nation $2.3 billion in 1929-30 and last year that figure had risen to $31 billion.

The salaries of the instructional staff account for a major portion of that expenditure, of course. The average annual salary of staff members in the earlier year was $1,420. Allowing for inflation, that $1,420 was the 1963-64 equivalent of $2,559 and the average salary paid in 1963-64 was $6,240. Last year it was $7,597 with classroom teachers getting an average of $7,296.

Many factors besides inflation of course account for the growth of the average salary. These can be summed up in the phrase "quality education" reflecting, among other things, the requirement of teachers better prepared to teach than was Lambert's "sweet young thing" who lived with her mother and father.

School children are now going to school longer, and learning much more, than they did when our average teacher was born. The statistics aren't available for the year 1930, but in the year before that for all schools--public and private--fewer than 400 each, 1,000 students in the fifth grade stayed long enough to graduate from high school and in the year after it the number had risen to but 417. It was 721 by 1967, and has been rising steadily. As the U.S. Office of Education puts it: "Educational expenditures have risen rapidly in recent years, reflecting the growth of the school-age population as well as the increased efforts of the nation to provide quality education for its young people. The annual expenditure is now five times what it was in 1949-50 (not allowing for changes in the purchasing power of the dollar) and further increases are projected for the years just ahead." Another measurement of the increased educational effort shows in comparison with the gross national product (GNP). Educational expenditures at all levels, from kindergarten through graduate school, were just under 4 percent of the GNP in 1930, and had risen to 6.6 percent of a much larger GNP in 1966.

"Elementary school growth is expected to stabilize at current levels until 1975, after which it will grow at least 10 percent by 1990," says the NEA Research Bulletin. "Secondary school enrollments will increase 25 percent by 1975 as larger proportions of school-age people seek to complete high school . . . . But it is the nation's colleges that will feel the greatest pressure of increased enrollments. College enrollments will increase 40 percent by 1975."

Onward and upward! But--the NEA looks for no abatement of the growing militancy of the educational profession. "We still have a lot of catching up to do," says Glen E. Robinson, director of its Research Division. "The NEA, while pleased with evidences of improvement in education, believes strongly that dramatic gains--not modest or meager ones--are demanded in the years immediately ahead."

STATEMENT OF
STANDARDS FOR PREPARATION OF SCHOOL PROFESSIONAL PERSONNEL LEADING TO CERTIFICATION

APRIL 1968

FOURTH DRAFT

State of Washington
SUPERINTENDENT OF PUBLIC INSTRUCTION

LOUIS BRUNO
State Superintendent

We hope that these standards will be studied carefully by interested persons and groups. We would appreciate having suggestions for their improvement by June 15, 1968.

William H. Drummond
Associate for
Teacher Education

Wendell C. Allen
Assistant Superintendent for
Teacher Education and Certification

PREFACE

Louis Bruno
State Superintendent
of Public Instruction

The real reason for state certification is to ensure that the professional personnel who serve the common schools are competent. In the State of Washington the responsibility for setting standards for certification and administering those standards is vested in the State Board of Education and the State Superintendent of Public Instruction by action of the State Legislature.

In schooling the importance of the teacher is second only to that of the learner. It is the role of the teacher and all who aid him to provide the best possible conditions for learning. In Washington law a "qualified teacher" is required for a school to be approved, and to be qualified a teacher must be certified. It is crucial, therefore, that state standards for certification encourage and promote the highest qualify of preparation. This is the reason for the present effort to improve Washington standards.

Changes in society and in education call for periodic review of educational standards and of local, state, and federal commitment of resources to education. Our study of the current scene and appraisal of trends shows that Washington could marshal its resources and knowledge more efficiently than it does, to prepare well-qualified professional personnel to serve in our schools.

It is apparent, also, that despite the considerable amount of preparation and great dedication of most of Washington's teachers and school administrators, today's--and especially tomorrow's--school faculties need more thorough, individualized and career-long preparation. We are aware, and sharply reminded, of the high rate of increase in knowledge which is occurring and its impact on our world. Yet many of us are unaware of the tremendous changes in education which are underway because of the impact of new knowledge. It is hard for us to see how teachers' ways of acting and organizing for learning can change from those ways with which we are familiar. Yet the school, as we have known it, is changing rapidly and the rate of change will be greater in the next decade. These changes are going to place even heavier and more varied demands upon our schools, demands which require greatly increased knowledge and improved skill of our school faculties. Much more thorough preparation continuing throughout each teacher's, each administrator's, and each assisting specialist's career will be needed--in fact, is needed now.

How can we bring about more thorough preparation?

We should expect more individualized, systematic, and performance-related basic preparation of teachers, administrators, and assisting specialists by colleges and universities.

We should expect public and private schools to assume greatly increased responsibility for each professional's on-the-job preparation beginning with provision of a year or more of internship experience. This will mean provision of skilled supervision and reduced work loads for interns and supervisors.

We should expect colleges and schools to collaborate in providing preparation all through the professional person's career.

We should expect associations of professional school people to participate in preparation programs at all stages and to assume responsibility for high quality performance.

Because the public expects a high performance educational program of wide scope and depth for all children and youth, we should expect the public to provide adequate resources for strengthening the preparation of school personnel during both their pre-service and in-service years.

This statement (the fourth draft) has been written after a careful review of the suggestions and criticisms to the third draft. Each of the four drafts has been different in format and content. In general, they have moved from a statement of philosophical beliefs and assumptions to a statement of criteria to be applied to teacher education irrespective of philosophical position, to a statement of processes and procedures for preparation. These essential ideas have continued through each draft:

1. Professional preparation should continue throughout the career of the practitioner.

2. School organizations and professional associations, as well as colleges and universities, should be recognized as preparation agencies.

3. Discussions about preparation should be based upon performance; performance in relation to stated objectives and the world of the practitioner.

4. Preparation and career development programs should be individualized.

INTRODUCTION

Wendell C. Allen
Assistant Superintendent for
Teacher Education and Certification

William H. Drummond
Associate for Teacher Education

As State Superintendent Louis Bruno said in his preface, the standards established by the state for the preparation of school professional personnel should encourage and facilitate the efficient marshaling of Washington's knowledge and resources to furnish the best quality of preparation. The revised standards attempt to do this by:

1. Placing the primary focus of preparation upon performance. The standards call for preparation experiences to be individualized and organized in some rational and systematic fashion related to professional roles.

2. Extending the responsibility for professional preparation to include the schools and the organizations of school professional personnel, most especially so for intern and continuing career preparation. Colleges and universities will continue their major role in basic preparation. They will have an increased responsibility to collaborate with schools and professional associations in the intern and continuing phases of career preparation.

These two provisions, relating preparation to performance in professional roles and enlarging responsibility for preparation to include schools and professional organizations, make possible putting all our resources to work to meet the state's needs for professional school personnel. This is a new setting in which school responsibility for preparation of staff is recognized and increased; a setting in which the preparation role of general and specialized professional associations is recognized and increased; and a setting in which the coordinating effort of the state will be needed to facilitate the most effective collaboration of these three "preparation agencies".

It is a setting in which the kinds, amount and duration of preparation experiences of each candidate will be an individual determination, requiring assessment and reassessment of many pertinent factors as his preparation and career advances. To say that he will make the major decisions as his career preparation proceeds, is no exaggeration. To say that the major preparation role of the three "preparation agencies" is to assist him in making assessments and decisions, is likewise no exaggeration. The major task of preparation agencies is to provide personal encounters with teaching-learning situations and provide adequate feedback data to the student of teaching so that he can make wise decisions for himself.

APPENDIX I: PREPARATION OF SCHOOL SERVICE AIDES AND INSTRUCTIONAL ASSISTANTS

Superintendent of Public Instruction Bulletin No. 113-67 of June 16, 1967, provides the recommendations of the State Board of Education for the employment and utilization of school service aides and instructional assistants. The State Board defined aides and assistants as follows:

> A (school) service aide is a person who works directly under supervision on tasks which are primarily of a routine or noninstructional nature.
>
> An instructional assistant is a person who assists in instruction under the supervision of certificated personnel.

School organizations and professional associations are encouraged to work closely with community colleges, as well as with colleges and universities, in the preparation of school service aides and instructional assistants. Performance criteria need to be determined as a basis for their preparation. At least one of the pilot projects which are being planned for the next three years will focus on the preparation of school service aides and instructional assistants.

As noted in the recommendations of the State Board, opportunities should be provided for service aides to prepare for roles as instructional assistants and for instructional assistants to qualify as teachers.

The development of professional preparation programs under these standards will call for new working arrangements and for various kinds of participation of the three preparing agencies at each stage of career development. Preparation will require more time, effort, and commitment by candidates and by college and school people than does most preparation today. For these reasons and because more experience and knowledge is needed to ensure steady, successful progress, it is expected that several pilot projects for teacher and administrator preparation will be carried out during the next three years. We expect that these projects will be supported in part by educational personnel development grants from the federal government.

The standards outlined in this document may be a sufficient basis for State Board of Education authorization of certification for educational staff associates. (Educational staff associate is the classification of school professional workers who assist the educational program in roles other than teacher or administrator.) Appropriate certification is not presently provided for several professional roles which come under this certificate type classification.

The standards which are presented in the following pages probably will need technical editing prior to their consideration by the State Board of Education. It should be noted that a number of matters which are covered elsewhere in state law or regulations are not covered in this document. These include the fact that certification regulations can not be retroactive; that is, the validity of any currently held certificate is not changed by new standards; the right of individuals to ask for review of any certification action or to appeal any final action; the bases for revocation of certificates; and general requirements for all certification such as minimum age, citizenship, and health.

Standards for vocational certificates are determined in accordance with the State Plan for Vo cational Education. Other standards not included are those for adult education teachers, for substitute and emergency substitute teachers, and for personnel who serve on a temporary or assisting basis.

Standards for community college and college and university faculty are not within the purvue of the State Board of Education.

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CERTIFICATION

Types and Categories

Three types of certification are provided based upon the three kinds of service performed by professional personnel in the elementary and secondary schools of the state. These kinds of service are: teacher, administrator, specialized assistant (educational staff associate).

> Teacher certification (for the primary role of teaching children and youth) is usually in one or two areas of subject matter preparation and for teaching students in one or more age groups. Teaching experience and further preparation may lead to increased specialization.
>
> Administrator certification (for the primary role of general school administration) is for administrative roles such as school principals and superintendents. Currently, there is an elementary, a secondary, and an overall category for school principals.
>
> Educational staff associate certification (for the primary role of specialized assistance to the educational program) is for such roles as: health services; speech and hearing impairment; visual and reading problems; for instructional resources; and for counseling, social work and psychological service.

Specialized preparation is needed for each kind of service. Each kind of service includes a number of fields or areas of preparation which, for purposes of certification, are classified as categories. These areas of preparation and categories of certification correspond to the personnel needs of the schools and thus are subject to change as schools respond to changing educational needs. Preparation is developed in response to these needs, and new categories within the appropriate certificate are then recognized.

Forms of Certification

Each type of certificate relates to career development, as follows:

Preparatory certificate

A certificate to authorize preparatory experiences with children, youth, and adults in school or school-related settings which lead to "initial" certification. This certificate may be issued for a period of one year. It may be renewed.

Initial certificate

A certificate which authorizes initial school service in a particular role as a staff intern, when the person is ready to begin assuming some independent responsibility for clients. This certificate may be issued for a period of one to five years.

Continuing certificate

A certificate which authorizes school service on a continuing or career basis. It would be subject to renewal should a holder leave educational service for a period of five years or more.

Consultant certificate

A certificate for those who qualify for roles which contribute to professional preparation and to the improvement of instruction. This certificate is optional; that is, available to persons who hold a continuing certificate, who desire to qualify. The certificate will be limited to five years of service. It may be renewed.

Assignment of Personnel

Certification provides a basis for and is adaptable to differentiation in professional roles. The kinds and categories of certification relate to qualifications for professional roles in the schools.

Thus, determination of assignments is approached as a function of initial and continuing preparation. For example; Initial certification as a staff intern calls for a limited assignment and special supervision as compared with that of a person with Continuing certification. Career (continuing) certification calls for continuing preparation for the same role and, if the individual desires, for a different role. Consultant certification relates to a specific role and calls for continuing preparation in the specific role.

Assignment of personnel should be based upon the person's ability and readiness to perform successfully the tasks contemplated after assignment is made. Continued in-service resources should be provided to assist the professional in improving or increasing the quality of his services. Such assistance should be systematic; that is, it should be based upon clear and agreed upon objectives, periodic assessment of performance--followed each time by non-threatening feedback and support.

PREPARATION

Steps in planning preparation experiences

The preparation of professional personnel based upon performance assumes a rational planning sequence or process:

1. Role definition. The preparation of professional personnel such as the elementary teacher, the guidance and counseling worker, or the school administrator, presupposes some idea of what the elementary teacher, the counselor, or the school administrator, actually does or should do. Role definitions should include consideration of both what is and what ought to be. Concerns of school organizations and their patrons, of professional associations, and of colleges and universities, should be revealed through role definitions. (This does not mean, however, that there should be a single definition for the state. Definitions should be related to the varying educational needs throughout the state and to the institutional resources which can be provided.)

2. Performance expectations or criteria. The design of preparation experiences should spell out the specific performance criteria (standards) which are appropriate to the particular professional role being prepared (see role definition above). These sets of performance criteria, one set for each role, are to be written and agreed upon by the colleges, school organizations and professional associations involved in establishing a preparation program. The criteria or expectations should be viewed in terms of observable behavior in two general categories: (a) those behaviors which occur when the person is practicing his professional specialization on-the-job at various stages of development; and (b) those knowledges, talents, and personal characteristics which are needed so that the behaviors in (a) can occur. It is understood that performance criteria will be redefined and rewritten as preparation arrangements are initiated and carried forward.

   Agencies drafting performance criteria may wish to use the following sequence:

   a. Determine the criteria which are to be applied in recommending a person for the Continuing certificate. These criteria should be consistent with career-level achievement in relation to the role definition above.

   b. From this list, determine which performance expectations (and at what criterion levels) should be applied in recommending a person for the Initial certificate.

c. From this determination, decide on what performance criteria will be applied for issuance of the Preparatory certificate.

d. Based upon the total career development outlined above, determine what criteria shall be applied to selection and recruitment efforts.

e. Determine the performance criteria to be used in recommending a person for the Consultant certificate. These criteria should be considered as additional to those listed for the Continuing certificate.

3. Development of tasks. With a given set of performance criteria, the preparation program should be organized into tasks--tasks which are designed to result in the teaching behavior defined as desirable by the agencies involved or responsible for preparation. Tasks should be varied and variable for each performance criterion (or combination of criteria) listed. Tasks need to be defined in relation to the materials and facilities available (see below); the variety of student talents and perceptions being confronted by them (see below); as well as by the specific performance criteria defined.

   Preparation traditionally has consisted of a number of assignments and requirements; these assignments literally have been learning tasks. These revised standards ask that tasks be organized in relation to performance objectives and that these tasks be used as the foci for sound learning sequences.

4. Organization of materials and facilities. At the same time that performance tasks are established, the appropriate contexts for learning specific behaviors need to be found or created. Some tasks can be accomplished on the college campus using peers or simulated situations; some tasks require real children in real classrooms. For example, the teaching of permissive teacher behavior requires the availability of permissive schools. Tasks and facilities have constraining effects on possible teacher education sequences and designs.

5. Models of performance. Models of people performing the specific behaviors defined as desirable need to be available to students in preparation. Models may be live or on tape or film. In any case, models should show (1) a variety of styles or ways of completing the specific task assigned, and (2) different levels of performance in accomplishing the same task by the same person. (It is important to learn that there is no one way to accomplish a teaching, administrative, or counseling task, and that human beings do not work at their peak efficiency or skill all the time.

Models should serve to introduce variety and diversity in task accomplishment. The total set of experiences should encourage the practitioner to take on new or additional ways of carrying out his assigned tasks. The more performance alternatives (varying responses) he has, the more potential freedom he has.

6. Assessment of readiness. Before specific tasks are ordered for a particular student, an assessment should be made of his readiness and willingness to undertake such tasks. Assessment should be based upon the performance criteria established. Experience and research should refine performance readiness measures as new experience adds to the present level of knowledge.

7. Ordering of tasks. Different students will require different ordering of tasks and different timing or pacing. Variation in task assignment is one evidence of individualization in preparation. Students should assume responsibility for ordering preparation tasks for themselves before they complete requirements for career (continuing) certification.

8. Scheduling tasks. Because the sequence of tasks to be undertaken may vary, and the length and number of experiences within the accomplishment of a given task also may vary for each individual, scheduling programs on an individual basis becomes complex. Scheduling often is as dependent upon the availability of facilities and equipment as it is upon the readiness of students to move ahead. Agencies responsible for preparation may need to redeploy resources in order to schedule experiences meaningfully.

9. Provision for feedback. Each time a task is undertaken by a student, some provision needs to be made for feedback. Feedback consists of having the student see, hear, or feel himself as he is (or was) while performing a task, and concurrently see, hear, or feel how others reacted to his performance. Feedback may have evaluative overtones (it usually does to the person involved because he has expectations for himself), but it may be designed to avoid assessment and evaluation by others. Next tasks need to be ordered in relation to feedback from working on previous tasks. Individualization in ordering and scheduling tasks for students is dependent upon accurate and timely feedback. Feedback serves as the key motivational element in self-improvement programs.

10. Recommendation and placement. As a person succeeds in mastering the performance expectations established by his preparing agencies, a recommendation for the issuance of the appropriate certificate will be made. Recommendation for certification involves an additional responsibility--it involves the recommendation of an appropriate placement. Appropriateness of placement includes consideration of the individual's specialized preparation, his teaching style, his performance achievement, etc.

Placement should consider both the present readiness or preparation the person has to handle the contemplated assignment, and the nature of the opportunities for further growth inherent in the contemplated assignment. In other words, placement and career development are inseparable and should be planned and recommended together whenever possible.

Career considerations

Professional preparation is a blending of the theoretical and the practical; of reflection and action; of the getting ready to do and the doing. Preparation and career planning involving the academic world of the university needs to be related to the world of the practitioner and vice versa. To assume that academic experiences need to occur prior to practical experiences in all cases, is unwise. Professional career development may be viewed as a series of careers. For example, a person may begin working in a school as a school service aide and, as a result of his experience, begin studying to become a fully qualified teacher. He may reach his goal, or he may, for a number of reasons, become an instructional assistant only. He may have been issued an Initial certificate, but in the course of his internship experiences, was unable to master all of the performance expectations required by his preparing agencies.

Programmatic plans for an individual should be based upon the criteria established and the perceptions and judgments of qualified personnel in the teacher education agencies involved. Decisions about competence or the ability of a person to perform specific behaviors (or respond to certain tasks) need to be made by those most knowledgeable of the person's activities. Career development, therefore, requires both the confrontation of the person with his own actions, and confrontations with professional colleagues who care and who are present on the scene.

Since learning and career development are not linear and apparently not orderly, wide variations in individual style and teaching procedures should be encouraged. Because teachers, as they grow older, continue to learn and to change while their students tend to remain at the same age, different styles and procedures need to be developed, just as different meanings or concepts need to be taught. Career development preparation experiences should be aimed at helping the teacher, administrator, and educational staff associate, meet his needs as he perceives them; of helping him communicate with students and others more effectively; of helping him develop more performance alternatives and resources throughout the length of his career.

The fulfillment of professional staff development is the improvement of student performance. Planners of professional preparation experiences need to relate their plans with the learning experiences provided for children and youth in schools.

COORDINATION OF PREPARATION

The involvement of several different kinds of agencies in the preparation of the professional worker necessitates coordination of their efforts. In some situations and at certain certificate levels, the coordinating responsibility is apparent and logical as a result of present practices; in others new arrangements are required.

The Preparatory certificate presents no special coordination problems. The person who becomes eligible for the Preparatory certificate is clearly identified with a college or university; school organizations and professional associations see him as a college student.

The Initial certificate holder, on the other hand, is neither a college student nor a full-fledged practitioner. Requirements from the college could interfere with his learning to perform; similarly, full-time responsibilities (load) applied by the school organization could interfere with optimum learning.

The Continuing certificate presents no new coordination problems. Upon issuance of the certificate, the holder is recognized as a fully qualified practitioner. There will need to be coordination of the efforts of preparation agencies to assist him in his continuing career development.

The processes and procedures used in recommending persons for Consultant certificates and the assignment of such personnel in working with student teachers and interns, require additional coordination. The identification of potential instructional leaders and their preparation and utilization require that colleges, school organizations and professional associations be responsibly involved in these processes.

Personnel Involved in Staff Development

As teacher education agencies assume responsibility for staff development, personnel need to be designated to carry out the accepted responsibilities and functions. As professional preparation is extended in time and as additional agencies are involved, additional teacher education personnel roles will be required. The following roles (role titles or role definitions) appear necessary for the administration of adequate career development programs:

Colleges:

(1) Someone who coordinates pre-service laboratory experiences (including observation, participation and student teaching) and helps bring together placement recommendations.

(2) Someone who coordinates field services, including placement, follow-up, extension and in-service offerings for the college.

School Organizations:

(3) Someone who coordinates pre-service laboratory experiences undertaken within the school organization. This person (or persons) should deal with requests for participation experiences in the school organization, and should work to expand pre-service laboratory experience opportunities.

(4) Someone who coordinates the intern and in-service preparation experiences made available in the school organization, with the personnel development needs of the school organization.

Professional Associations (general and specialized):

(5) Someone who coordinates pre-service professional experiences for an association; that is, someone who speaks for the profession regarding selection, recruitment, and induction of prospective professional personnel; someone who focuses attention on the nature and extent of opportunities for pre-service preparation; someone who communicates programmatic developments to and from the profession.

(6) Someone who coordinates in-service training experiences; that is, someone who speaks for the profession regarding the internship and consultant programs; someone who focuses attention on self-renewal programs for holders of continuing certificates; someone who communicates programmatic developments to and from the profession.

Staff Development Coordination

Coordination of the professional preparation activities among the agencies may be accomplished through a Staff Development Coordinator (SDC) who is designated to work with one or more school organizations, one or more colleges, and one or more professional associations, in the preparation of persons for one or more professional roles. Staff Development Coordinators will be persons employed by the State Superintendent of Public Instruction as needed.

Duties of Staff Development Coordinators include: developing and maintaining effective communication among and between the personnel responsible for teacher education (listed above); helping in program development and evaluation; organizing and calling together committees to ensure appropriate collaboration among the agencies; coordinating procedures used for developing individual recommendations for certification. (Recommendations will be forwarded through the SDC.) Normally the office for a SDC will be located in one of the school organizations making up a cluster of preparation agencies.

The development of adequate coordination of professional preparation experiences will take time. Pilot projects during the next three years should provide knowledge about how coordination may occur and, at the same time, help prepare personnel to assume responsibility for preparation programs under these standards. There is no preconceived plan for bringing together particular school organizations with particular colleges or universities, or professional associations. Eventually all areas of the state, however, will be included in preparation arrangements.

Personnel in colleges, school organizations, and professional associations are encouraged to begin planning staff development programs on an interagency basis immediately, consistent with their own purposes and needs. The processes and procedures outlined in this document provide a planning framework.

PROGRAM APPROVAL AND REVIEW

The preparation programs of teacher education agencies are subject to approval by the State Board of Education.

The State Board will approve a program of professional preparation which:

1. Is based upon an analysis and a description of the performance expectations for the particular professional role for which the program is designed. Because roles change as new knowledge is created, analyses and descriptions of performance need to be revised periodically.
2. Provides for inter-institutional collaboration; that is, the program is conceived and developed by three types of agencies --colleges, school organizations, and professional associations.
3. Corresponds with and is based upon the current and projected personnel needs of the state.
4. Is individualized; that is, individual needs are cared for and the individual talents of persons are nurtured; learning tasks are chosen or assigned as a consequence of an individual's readiness to perform.
5. Provides frequent and periodic feedback to participants re their performance.
6. Is offered by agencies which have the human and material resources required to field the proposed program.
7. Is offered by agencies which provide frequent and periodic performance feedback to their own faculties.
8. Is offered by agencies which have worked out an agreed upon system for recommending persons for changes in certification.
9. Is offered by agencies which have on file with the State Superintendent of Public Instruction a description of the program based on these standards and the items listed in "Preparation", above.

Following initial approval of programs, teacher education agencies are to file annual progress reports together with descriptions of changes in programs and the resources committed to them.

A comprehensive review of teacher education programs and renewal of State Board of Education approval of a program will be on a three to five-year schedule. The review will include visitation and meeting with the key people involved in offering programs, by committees of highly qualified professional personnel (State Liaison Committee).

In this setting the function of state standards is to establish the types and categories of certification and to provide the ground rules for determining the preparation experiences or encounters. The major functions of the state education agency become those of assisting in the coordination of preparation activities, of making sure that agencies use appropriate processes and procedures, and of providing for the issuance of certificates.

Three kinds of professional roles in the schools furnish the basis for classification of certificates. These roles are: (1) teaching; (2) administration; and (3) professional services other than teaching or administration which contribute to instruction. Within each of these kinds of certificates there may be categories corresponding to specific roles such as mathematics teacher, school principal, and speech therapist.

Each kind of certificate may be issued in four forms, as follows:

> A "preparatory" certificate
>
> A certificate to authorize preparatory experiences with children, youth, and adults in school or school-related settings which lead to "initial" certification.
>
> An "initial" certificate
>
> A certificate to authorize initial school service in a particular role as a staff intern, when the person is ready to begin assuming some independent responsibility for clients. The "initial" certificate may be utilized for from one to five years.
>
> A "continuing" certificate
>
> A certificate to authorize school service on a continuing basis, attesting to the fact that the person has shown that he can perform effectively those tasks required of full-fledged professionals.
>
> A "consultant" certificate
>
> A certificate for those who qualify for roles which contribute to professional preparation and to the improvement of instruction. This certificate will be optional; that is, available to persons who hold a "continuing" certificate who desire to qualify. The certificate will be limited to five years of service, but it may be renewed.

APPENDIX II: MOVEMENT OF SCHOOL PERSONNEL TO AND FROM WASHINGTON

In the 1966-67 school year, 559 or about 15% of Washington's graduates who were prepared for teaching, were certificated by other states. In addition, incomplete reports show that 633 experienced Washington school personnel moved to other states. Washington teachers went to 43 states and several countries.

During the 1966-67 year, Washington secured 451 first-year teachers and 1,119 experienced school personnel from 48 other states and territories and from several foreign countries.

This relative balance of movement of teachers to and from Washington has been the case in recent years. Among a variety of reasons for this situation is the fact that Washington's teachers have little difficulty meeting certification standards of other states, either at the beginning or more advanced levels of preparation. Also, Washington accepts beginning and experienced teachers from other states who are graduates of accredited four-year programs of teacher preparation.

It is expected that the present situation with respect to the relative ease of movement of teachers between Washington and other states would not be altered under the standards envisioned. Persons recommended for initial certification in Washington would be at or above current levels of preparation. Graduates of accredited teacher education institutions in other states, who are at the beginning level, would be eligible in Washington for initial certification. Experienced out-of-state personnel with generally comparable levels of preparation would become eligible for continuing or consultant certification following successful experience in the state.

As at present, applications for certification from out-of-state persons would be made to the Superintendent of Public Instruction.

APPENDIX III: DEVELOPMENT OF CERTIFICATION STANDARDS IN WASHINGTON--HISTORICAL PERSPECTIVE

By action of the State Legislature in the early part of this century, teacher education and the certification of personnel who work in the schools of the state have been responsibilities of the State Board of Education. Until 1949, Washington had a prescriptive program of preparation; that is, the State Board established the number and nature of courses which were required for teacher or administrator preparation. Persons desiring to be teachers had to take the prescribed courses and submit evidence of successful completion to the State Superintendent of Public Instruction, who would check for compliance and issue certificates on the basis of course credits and grades.

A dramatic change in the state's role in certification was made by State Board action in 1949. Instead of a prescribed program arrangement, the 1949 regulations established a program approval approach to preparation (one of the first states to do so). In the program approval approach the state described in general what a program should include and invited colleges and universities to plan programs meeting these characteristics. Once a college's program was approved, certification became automatic; the college recommended a person for a certificate--the state issued that certificate. The State Superintendent no longer counted credits and courses for graduates of Washington institutions.

The 1949 teacher education regulations had other ramifications; the colleges and universities in the state began preparing both elementary and secondary teachers. All teacher preparation for elementary and secondary teaching was extended to five years of college. The five-year standard certificate program was organized so that both colleges and universities, and school organizations were involved in teacher preparation. A person becoming a teacher received a provisional certificate at the completion of an approved baccalaureate degree program; he went out to teach and, after a year of successful teaching, was to complete a fifth college year of training--the fifth-year planned jointly by the individual, his school organization, and the college from which he was graduated.

The 1949 certification standards, in a real way, (1) extended teacher preparation in time, both in college-based training and in school-based experience; (2) broadened the academic preparation of teachers; (3) provided a necessity for cooperation between colleges and school organizations; (4) fostered more flexibility in program planning; and (5) decentralized authority and responsibility for teacher education.

In 1961 the State Board approved a number of minor changes in certification which, in effect, deepened academic preparation for teachers and extended the requirement for standard certification to include two years of successful teaching. The 1961 revision of standards reaffirmed the essential characteristics of the 1949 regulations.

In 1965 the State Board again encouraged the State Superintendent of Public Instruction to conduct a study of teacher education and related matters, and the State Advisory Committee on Teacher Education and Certification, and related committees, began discussions of needed changes. The following quote from the third draft of Guidelines for Preparation of School Professional Personnel Leading to Certification, summarizes the rationale for developing new standards:

> "In reviewing changes which are visible in American society and their impact on education, it becomes evident that teaching is changing. The responsibilities given teachers and the roles they are expected to play are changing. Consequently, the question to be considered in this document is: How should teacher education and certification be changed considering what is now known about teaching and what seems predictable for the future? Standards, when revised, should be designed for the future. Standards should help direct change in a desirable direction.
>
> "What factors should be considered in revising certification standards?
>
> 1. The present pattern of preparation and certification has been in effect for a number of years. The basic design of the present pattern went into effect in 1949 and was revised in 1961.
>
> 2. Staff utilization is changing. Numerous patterns of team teaching, differentiation of teaching assignments, the use of aides and the increased need for specialists seem to indicate that the days of the isolated classroom are numbered and that new ways of applying teaching talents are now required.
>
> 3. The role of the school has expanded and schooling has become an integral part of living at any age. Rapid technological change and a new look at career development would indicate that people can learn what they want to learn when they want to learn it, if they have the opportunity.
>
> 4. Recent curriculum study is resulting in reform. More stress is placed on thinking and problem solving. More emphasis is being placed on the student's perceptions, the student's own pace for learning, the student's concept of himself.
>
> 5. More resources are available for education. The federal government is now committed to massive support; economists have shown that investment in education is sound public policy.

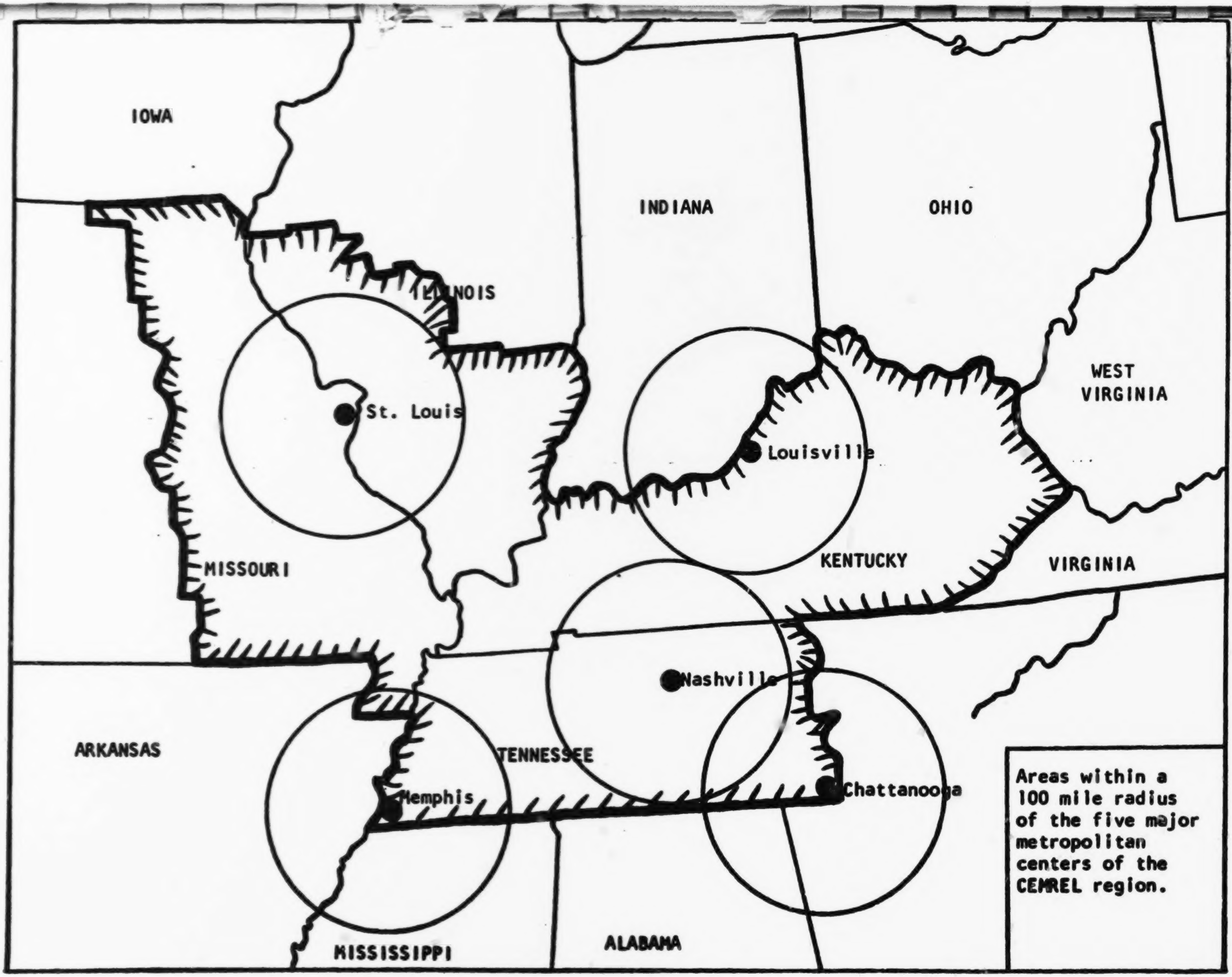
6. Professional organizations and societies have become interested and effective in promoting the welfare of their members. Some groups have become engaged in the recruitment and induction of members, and the advancement of the art and science of teaching.

7. College students and other intellectuals are questioning the value of impersonal pre-packaged programs of study on a "take it or leave it" basis. The tenor of the times would indicate that schooling, especially required schooling, needs to be more personal and humane."

As a result of work by the Standards Revision Committee and other working committees (including the Teacher Education Liaison Committee, the Committee on Preparation of Teachers for Young Children, the Committee on Preparation of School Administrators, and a number of advisory committees serving the curriculum division of the Superintendent of Public Instruction), a draft of new proposed teacher education standards (first draft) was written on March 30, 1967, and distributed to committee members.

Reactions to the first draft resulted in the writing of a second draft, dated April 20, 1967, which was distributed to all advisory committees and to colleges and universities. The second draft was the central topic for discussion at the annual Conference on Teacher Education held at Central Washington State College in Ellensburg, in May 1967.

A third draft was written during the summer of 1967 and distributed to every school in the state, to each local board of education, to state legislators, to professional associations, and to colleges and universities. The third draft was designed for reaction. Space was provided for remarks; individuals were requested to be critical and to send criticisms to the Superintendent of Public Instruction by January 1968.



Areas within a 100 mile radius of the five major metropolitan centers of the CEMREL region.

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ILLINOIS
WEST VIRGINIA
St. Louis
Louisville
MISSOURI
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